

FIG. 1

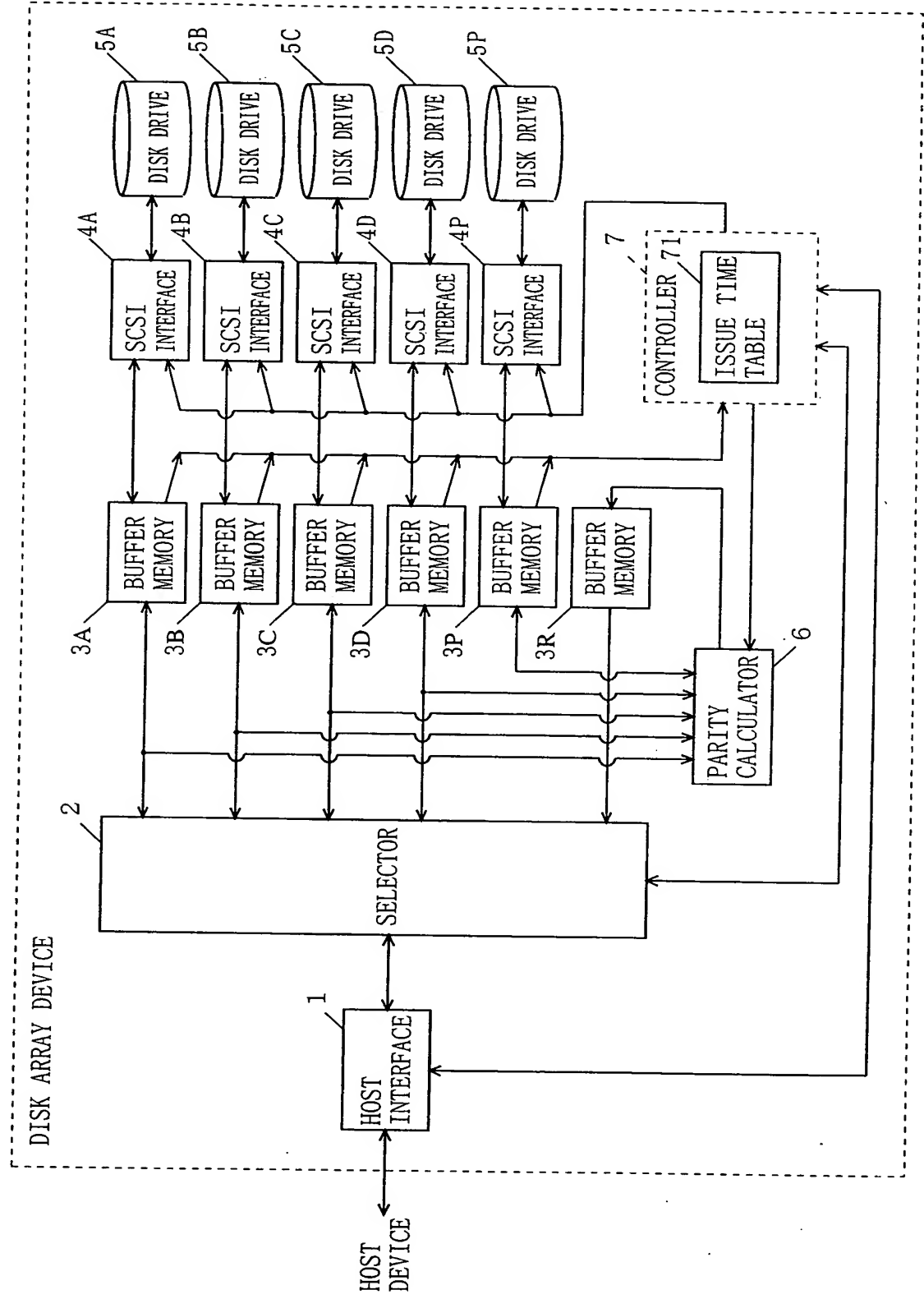


FIG. 2

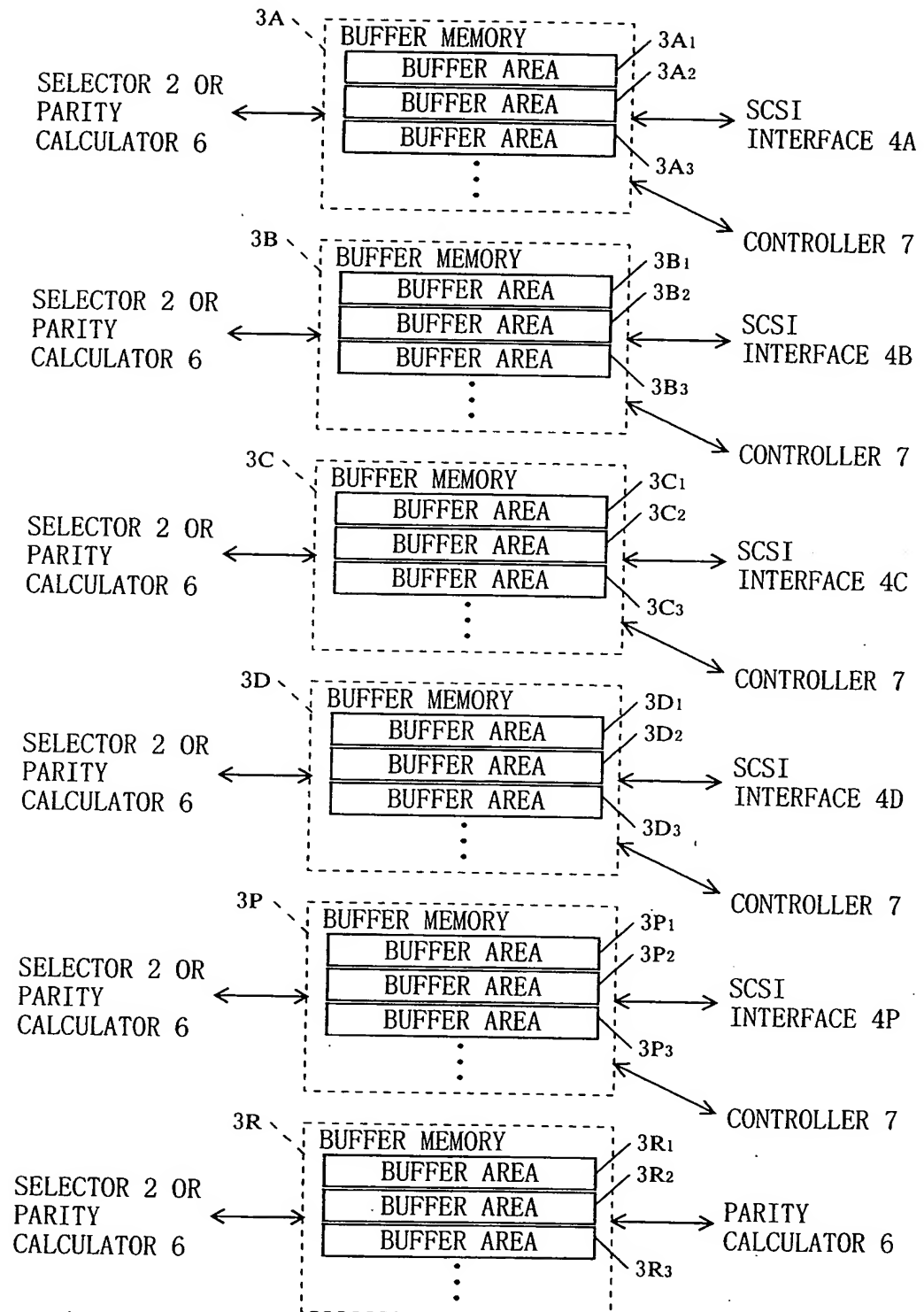


FIG. 3 a

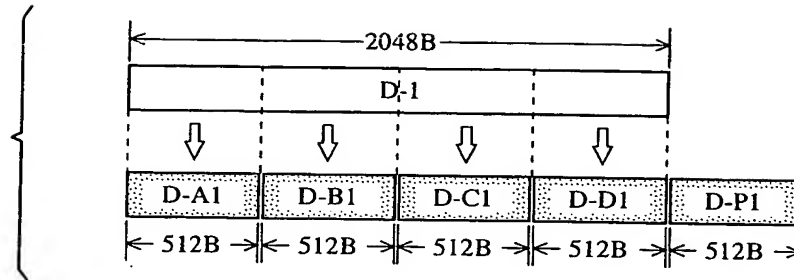


FIG. 3 b

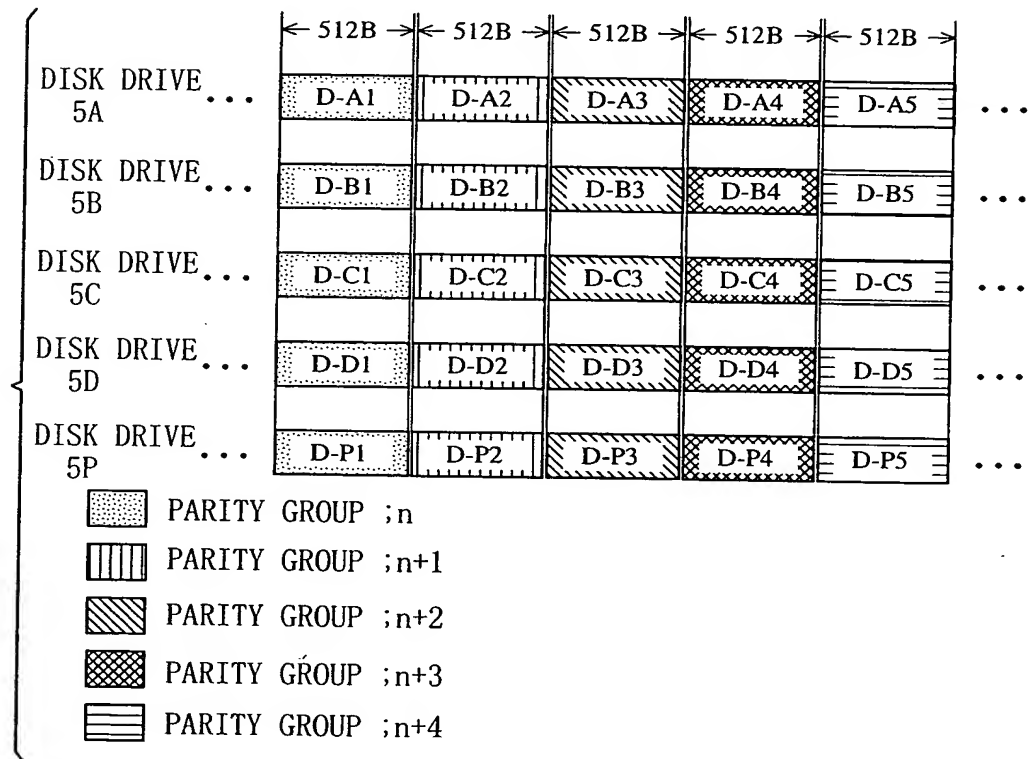


FIG. 4 a

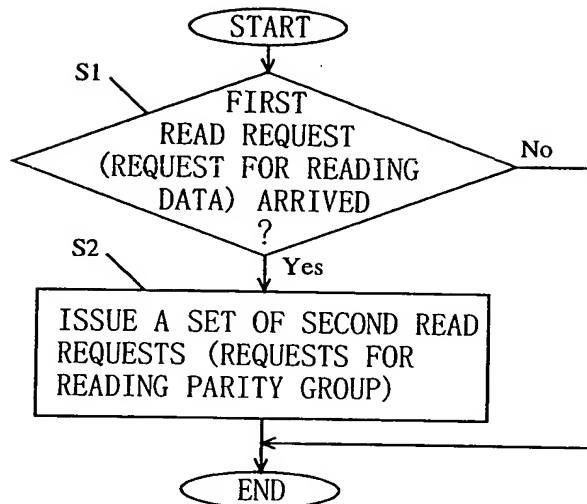


FIG. 4 b

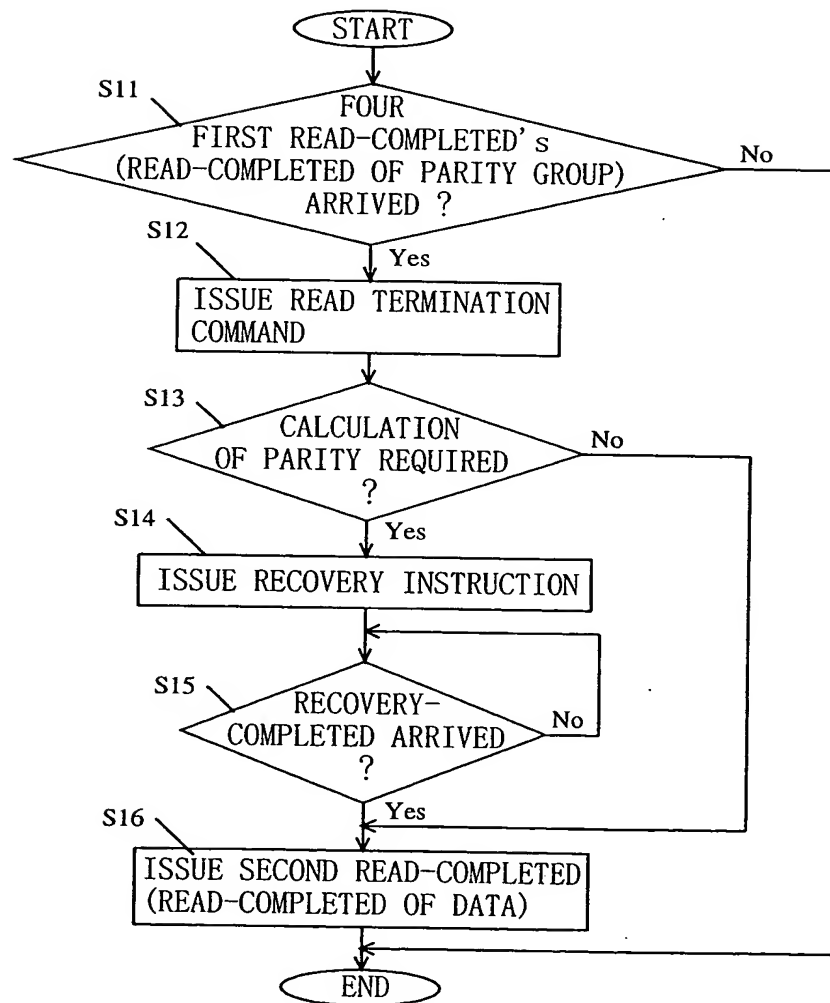


FIG. 5 a

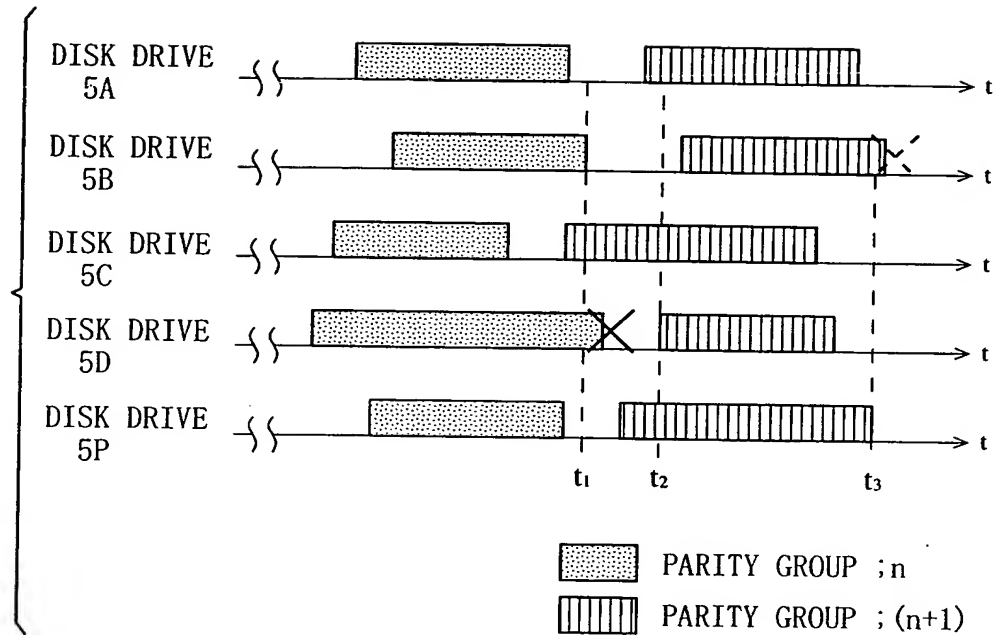
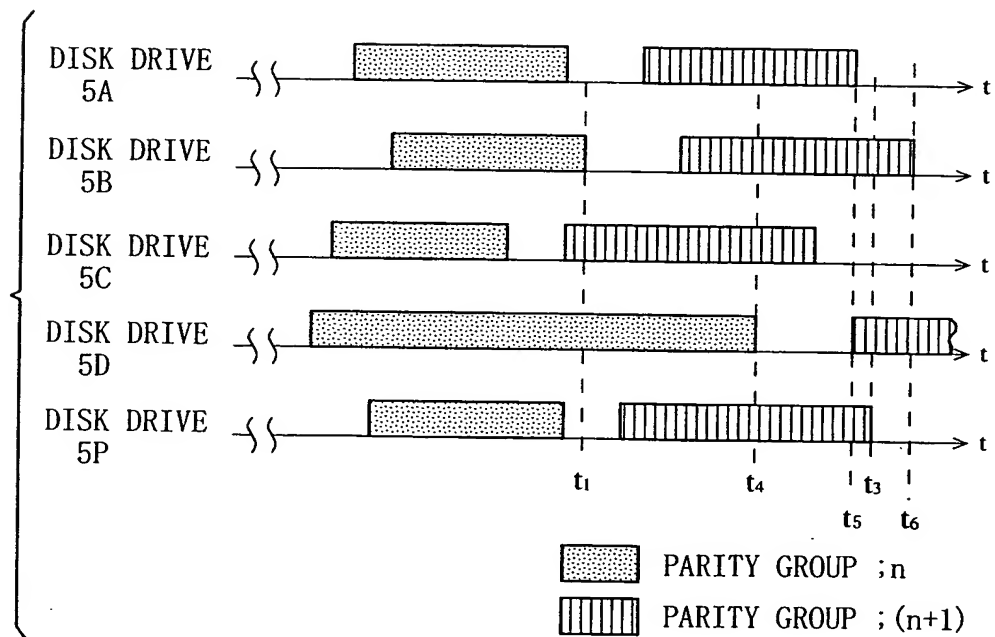
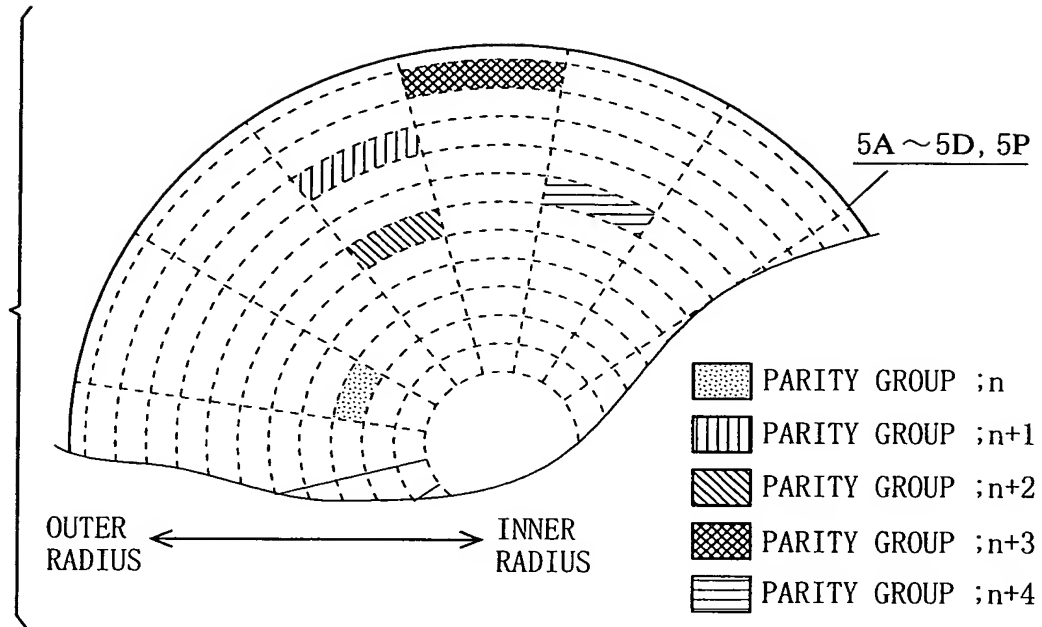


FIG. 5 b



F I G. 6 a



F I G. 6 b

ORDER OF SECOND READ REQUESTS	「n」 → 「n+1」 → 「n+2」 → 「n+3」 → 「n+4」
READING ORDER	「n」 → 「n+2」 → 「n+4」 → 「n+1」 → 「n+3」

FIG. 7 a

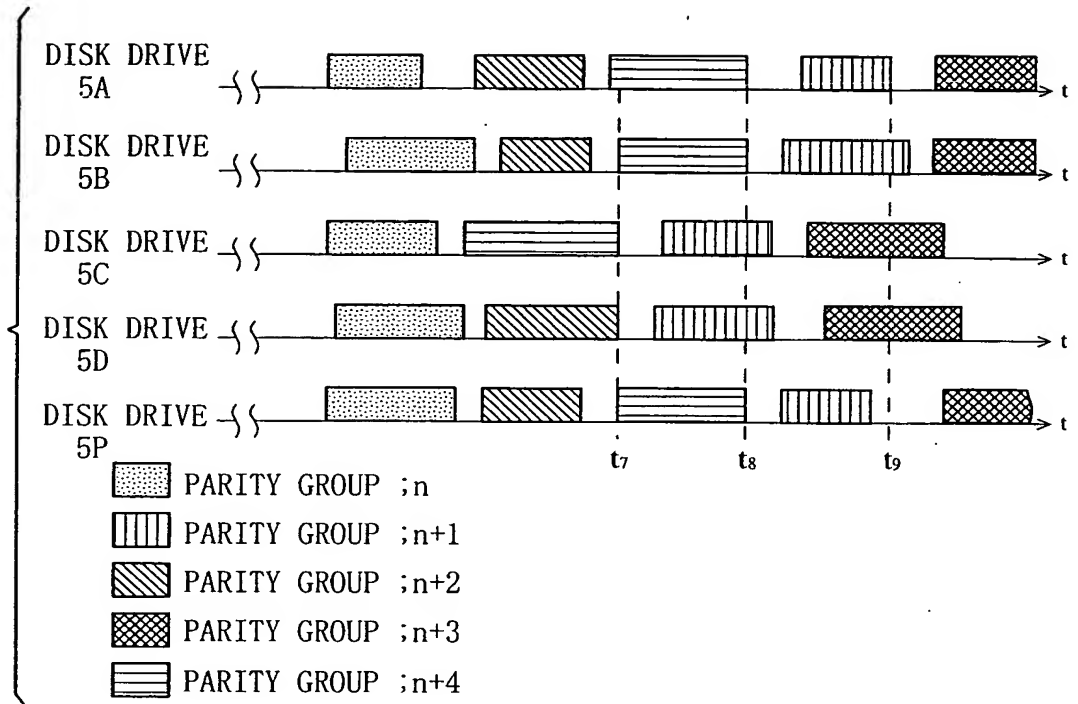


FIG. 7 b

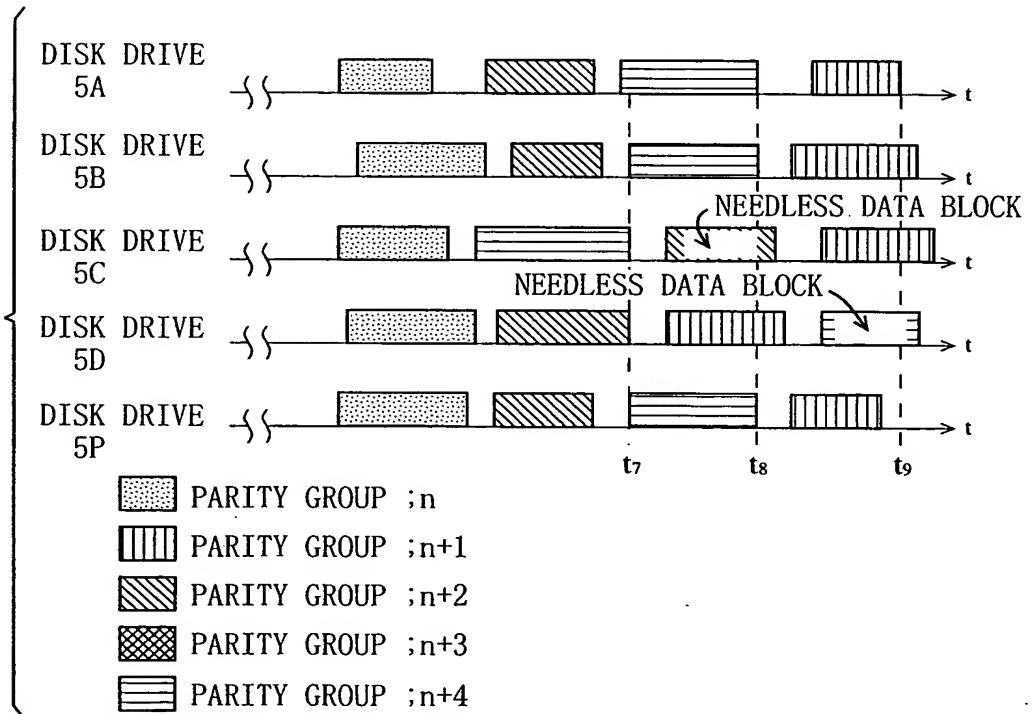


FIG. 8 a

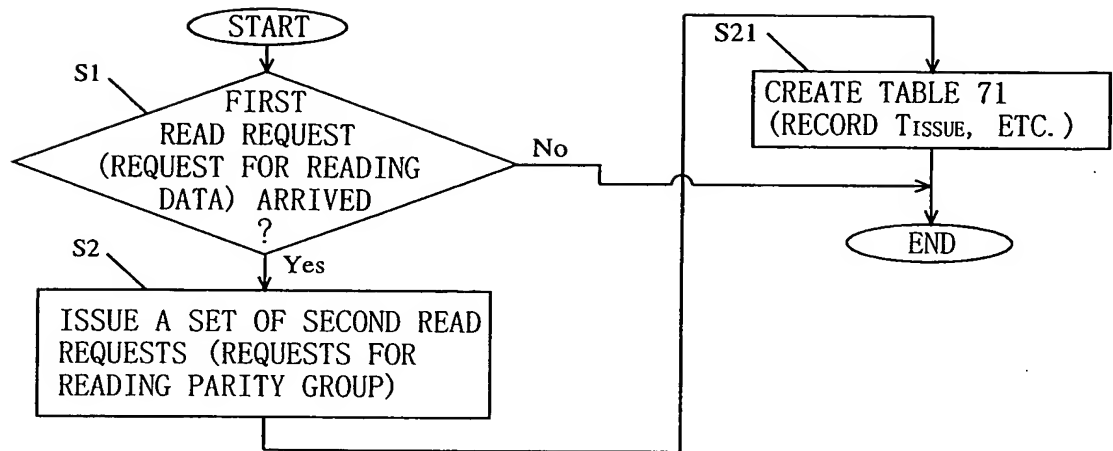


FIG. 8 b

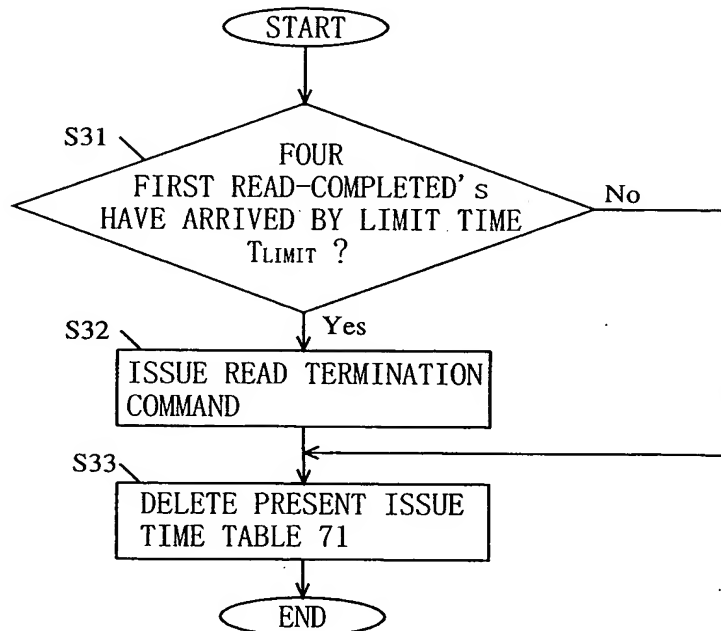




FIG. 9

71

ISSUE TIME $t_{\text{ISSUE}}$	BUFFER AREA

FIG. 10 a

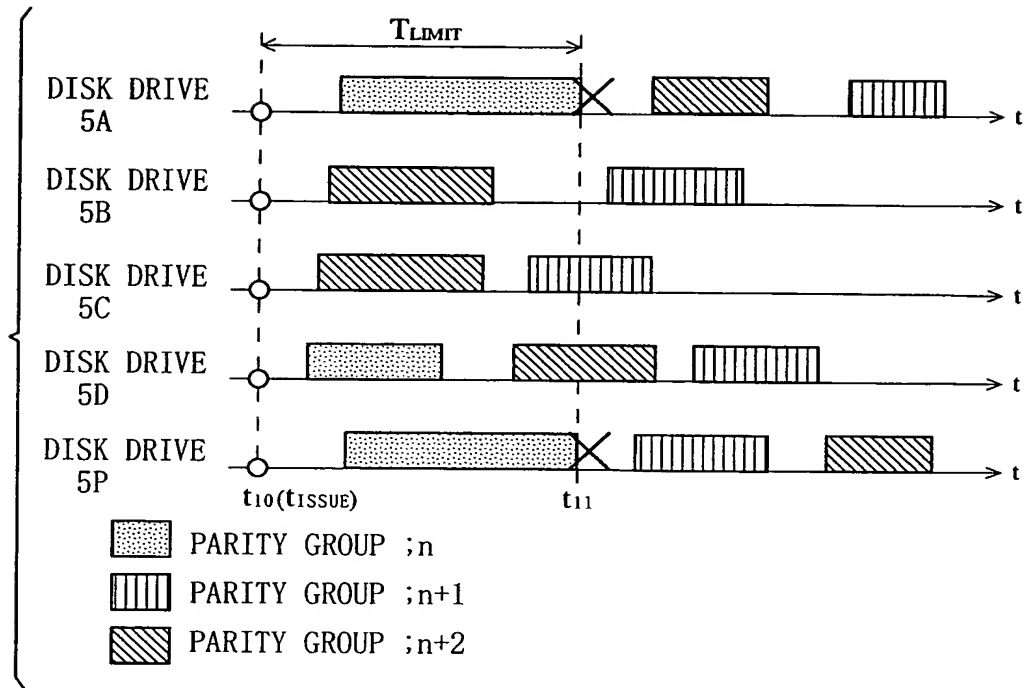


FIG. 10 b

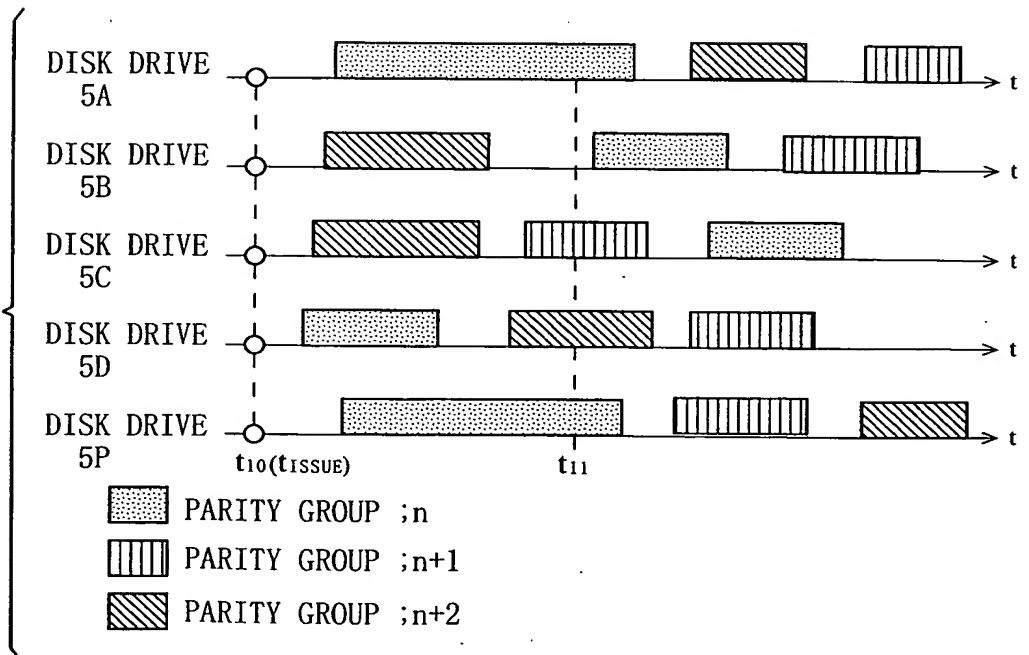


FIG. 11

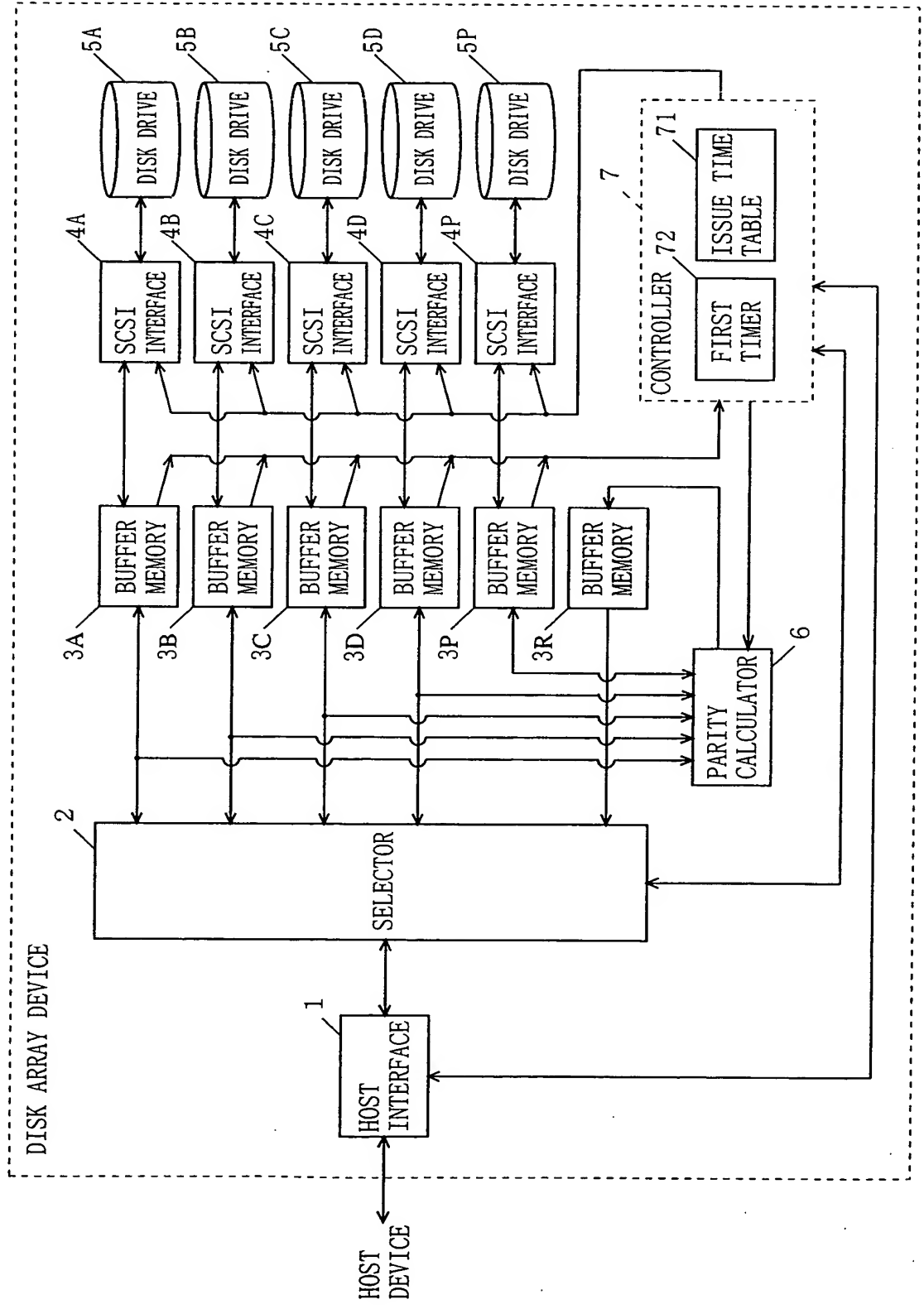


FIG. 12a

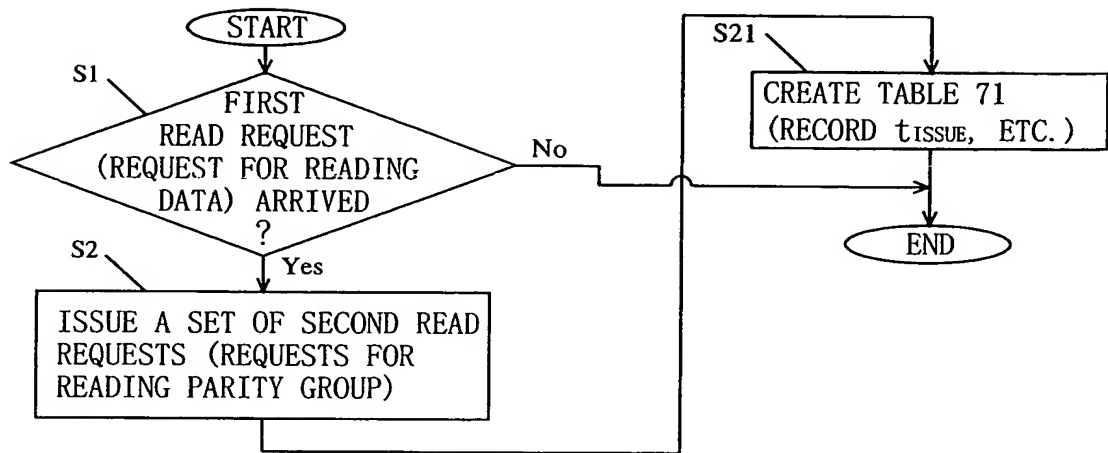
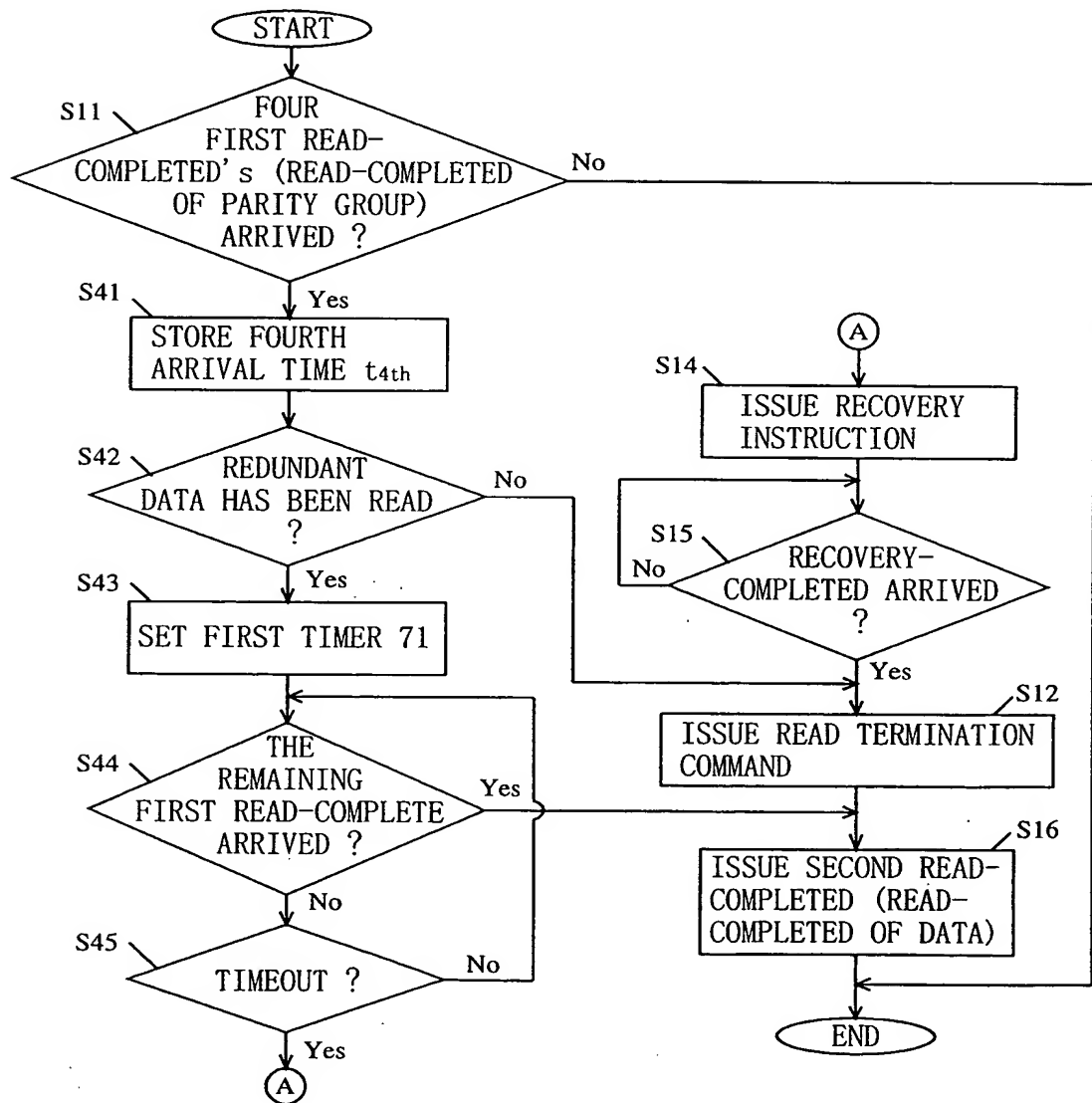


FIG. 12b



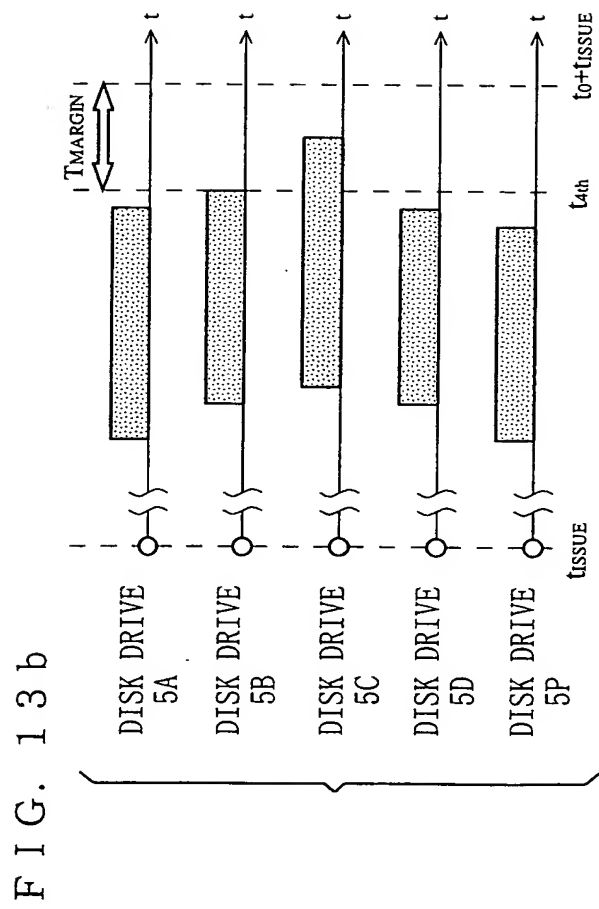
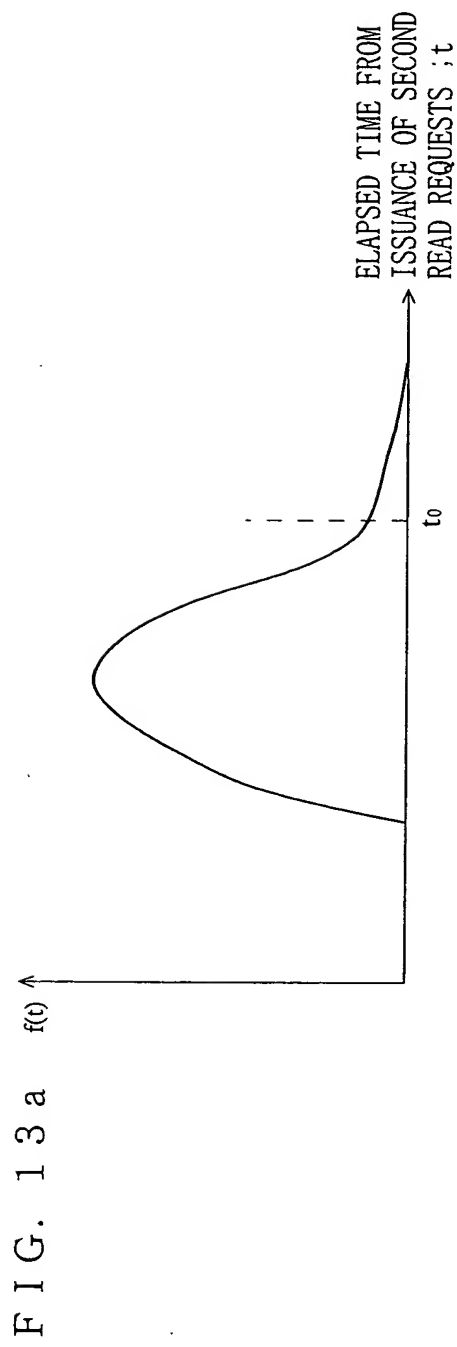


FIG. 14 a

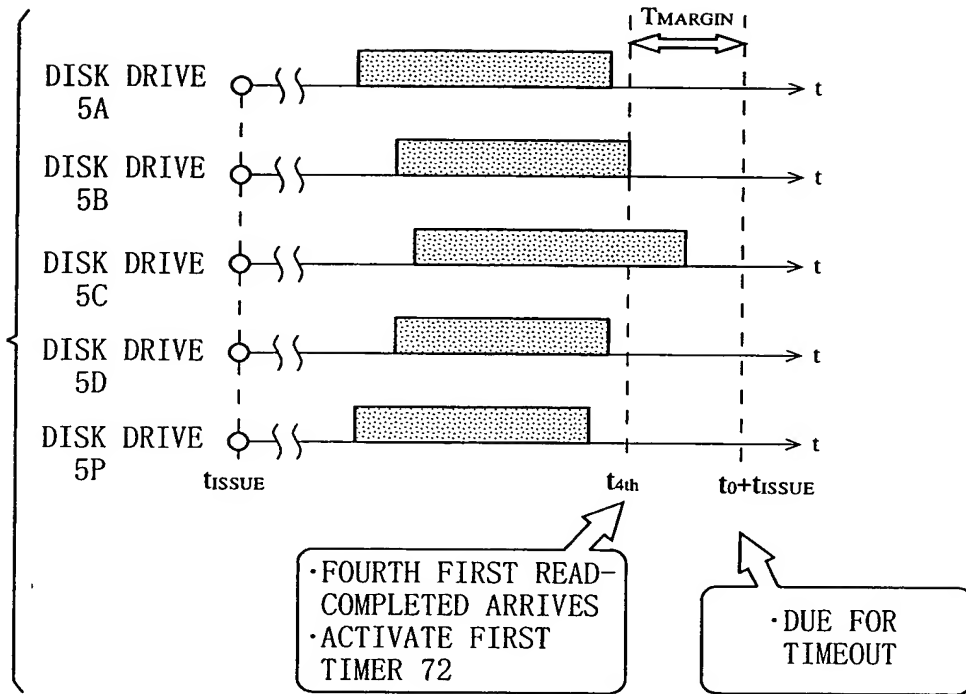


FIG. 14 b

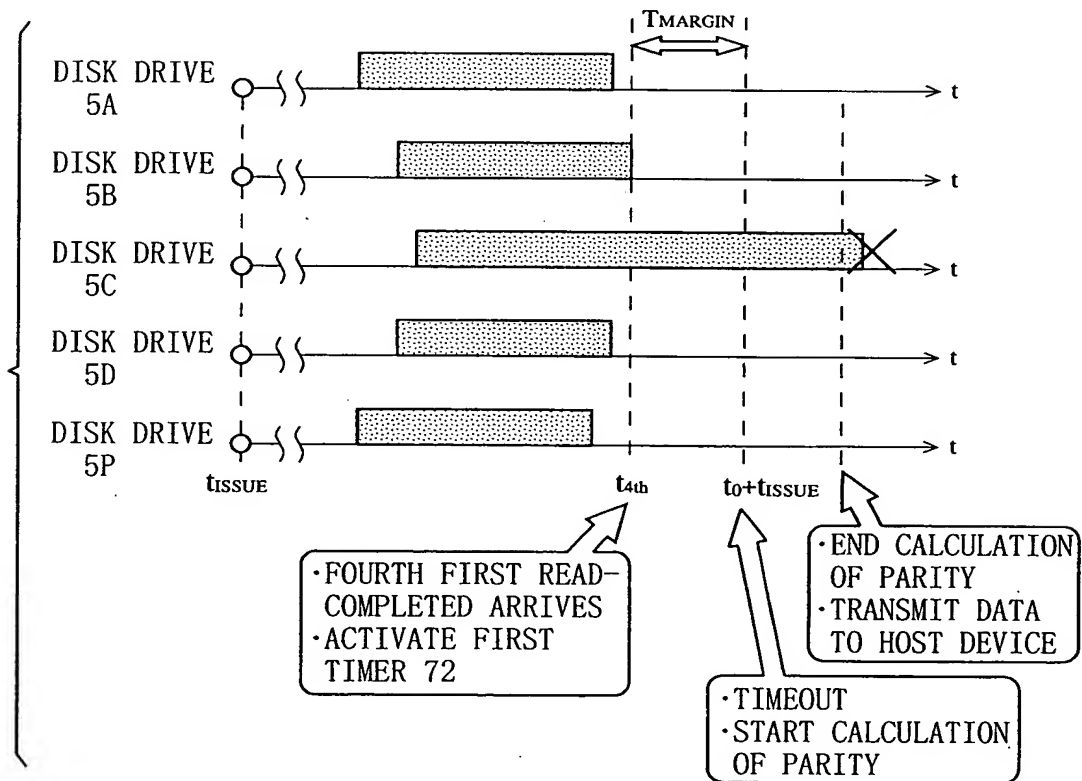


FIG. 15

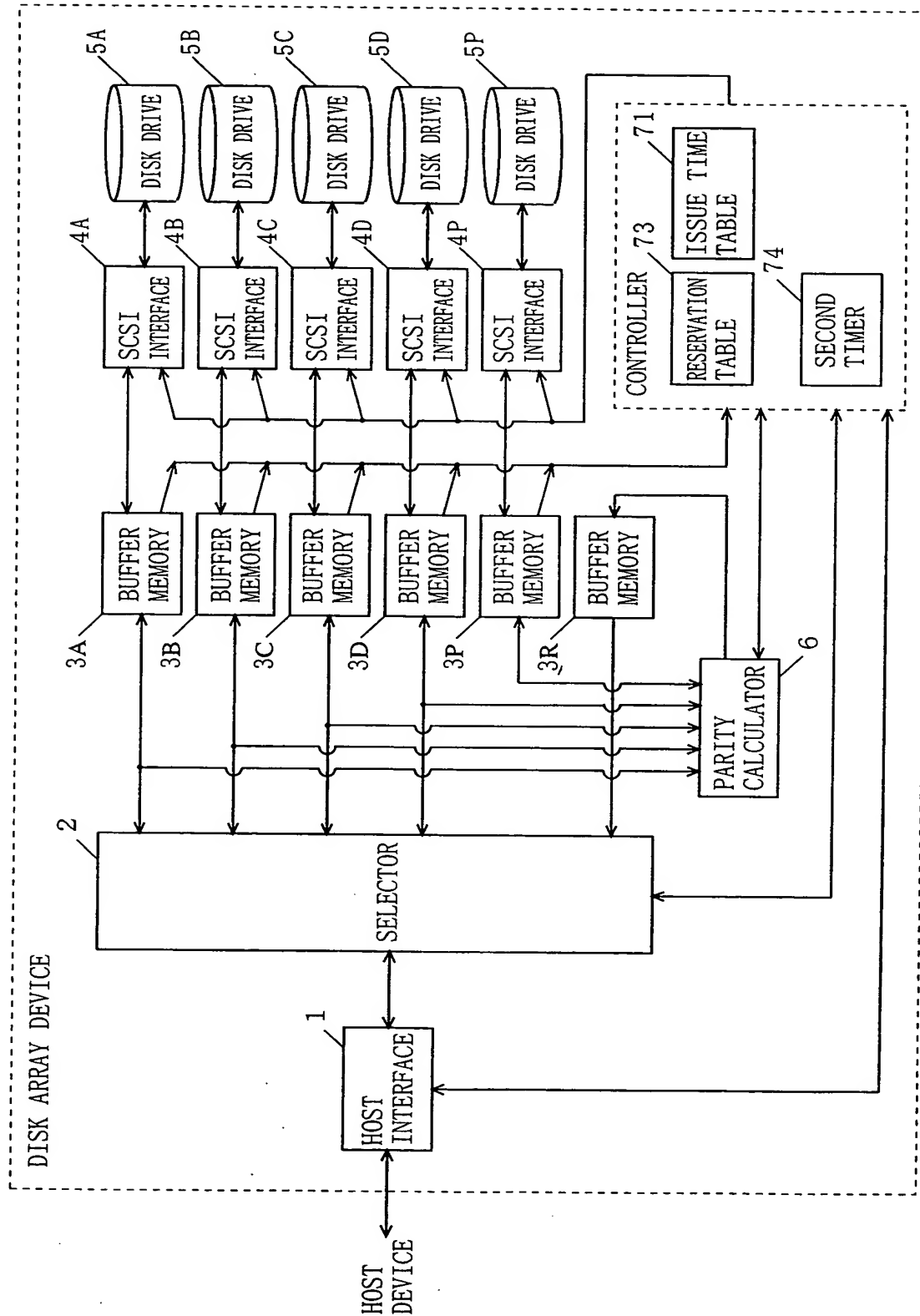


FIG. 16

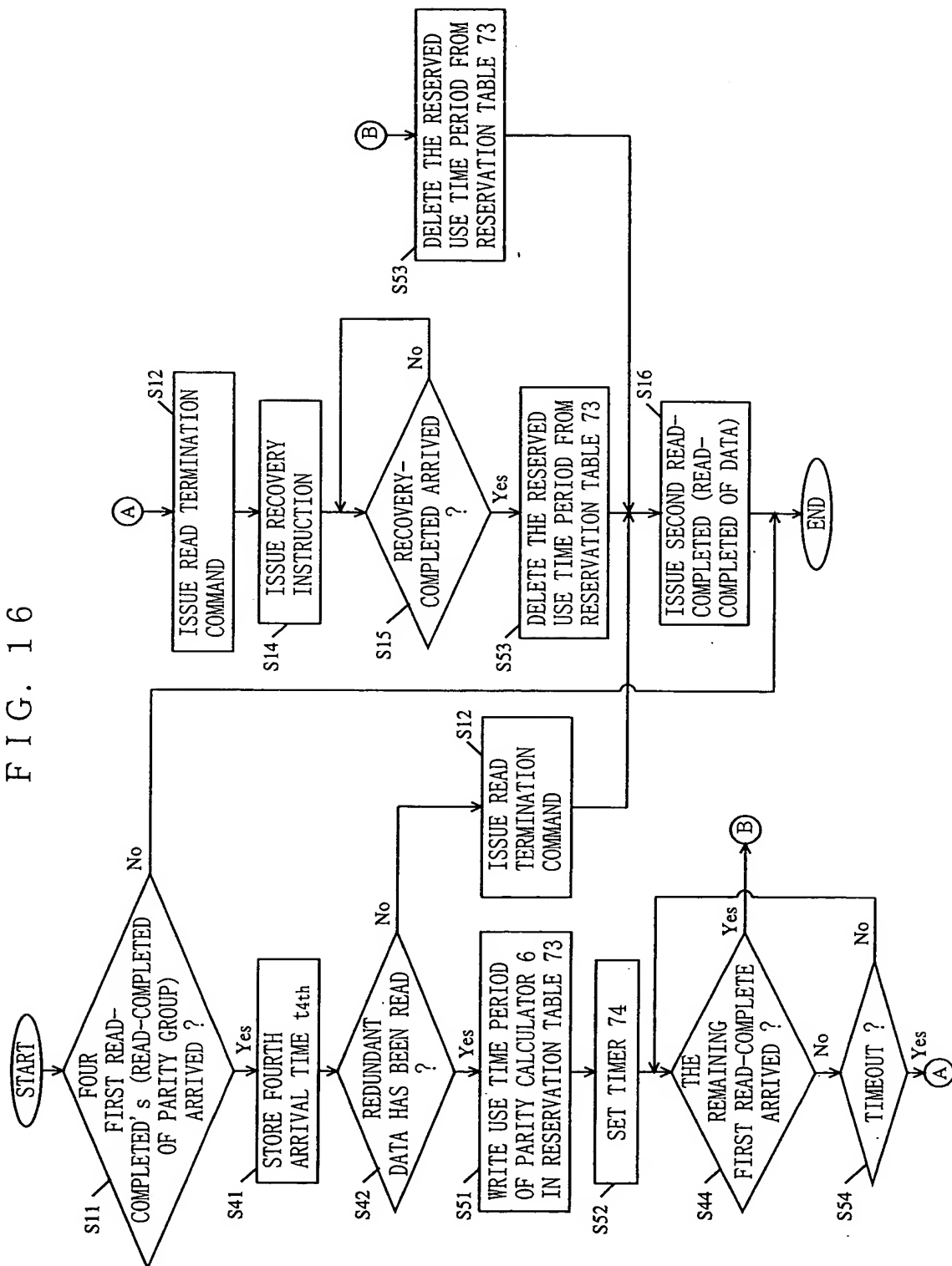




FIG. 17

73

USE TIME PERIOD	BUFFER AREA

FIG. 18

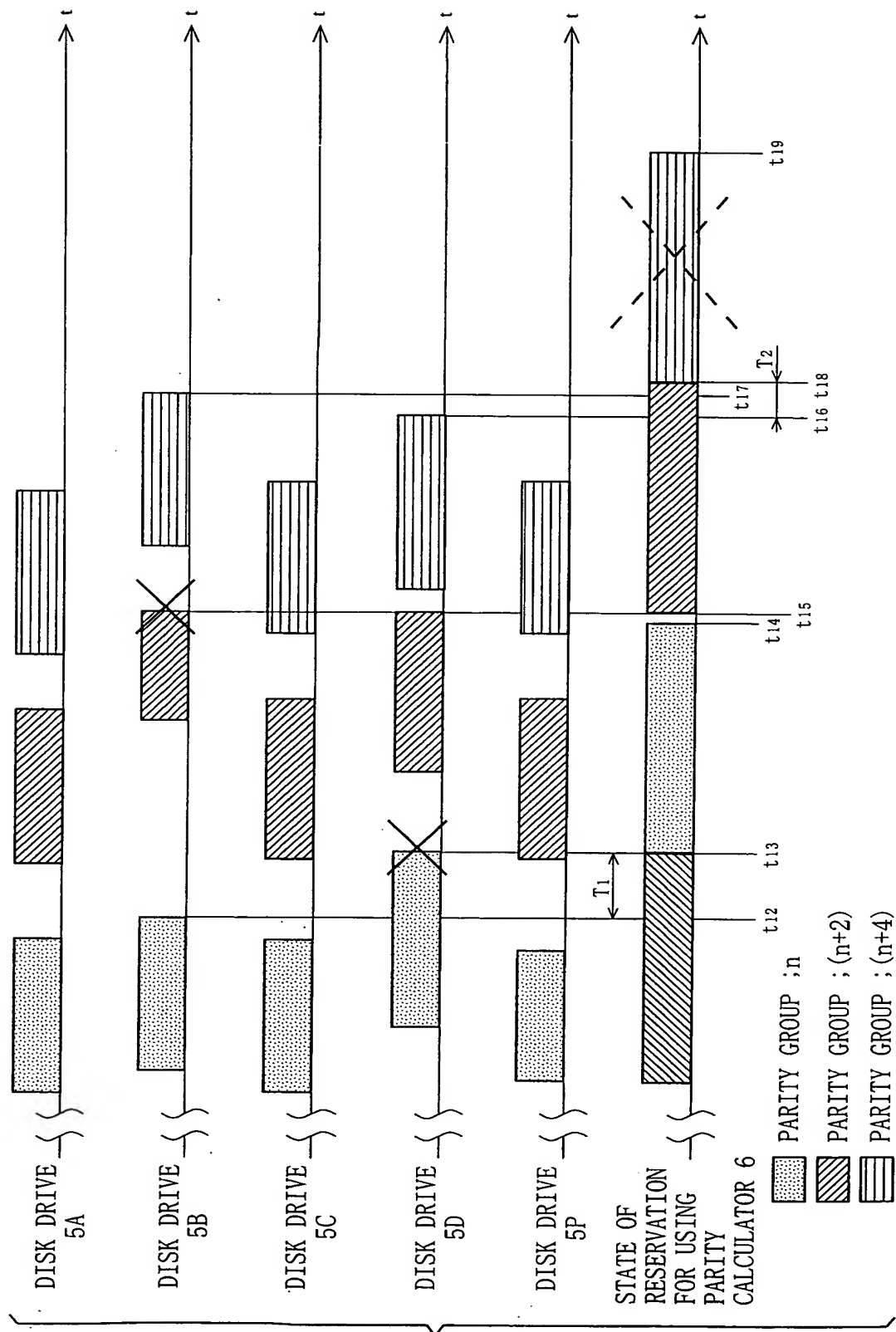


FIG. 19

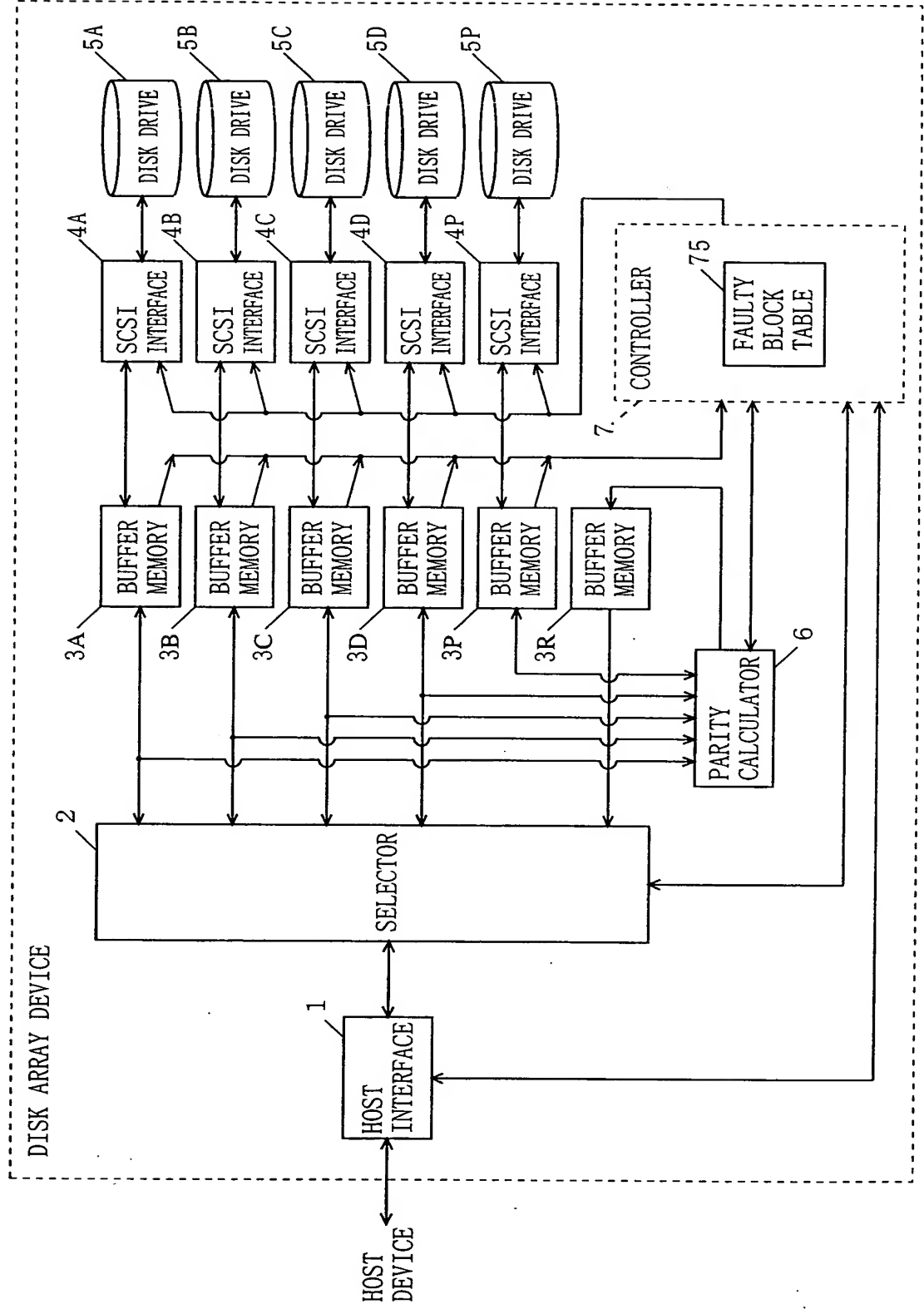


FIG. 20

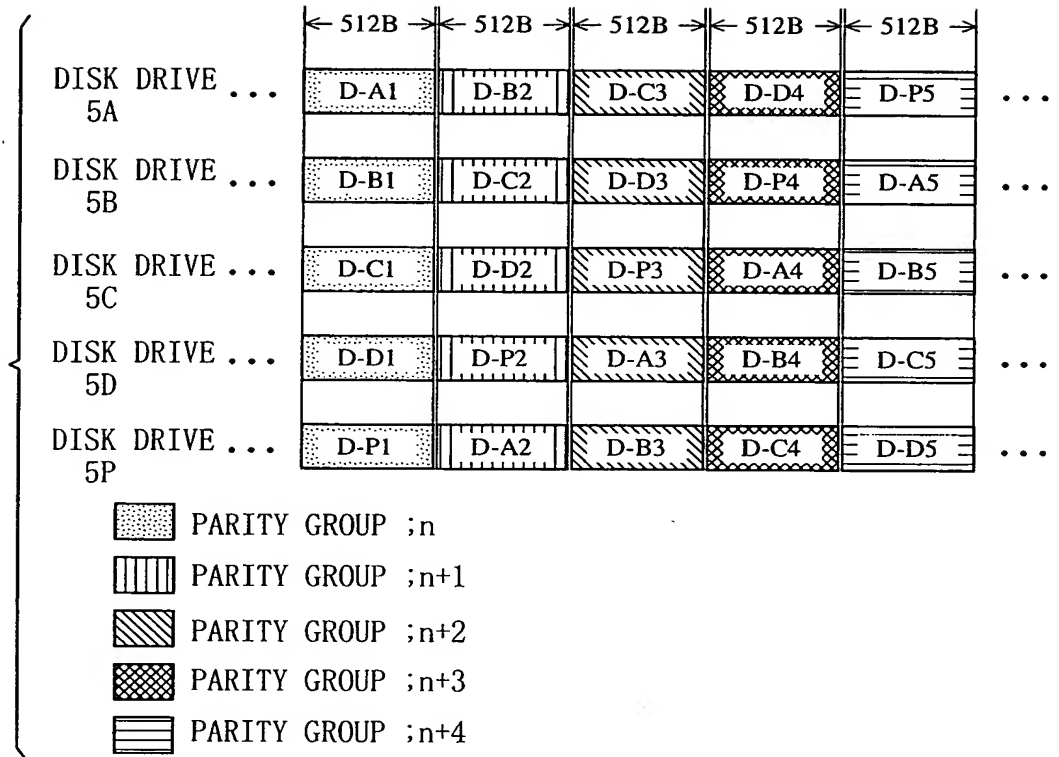


FIG. 21

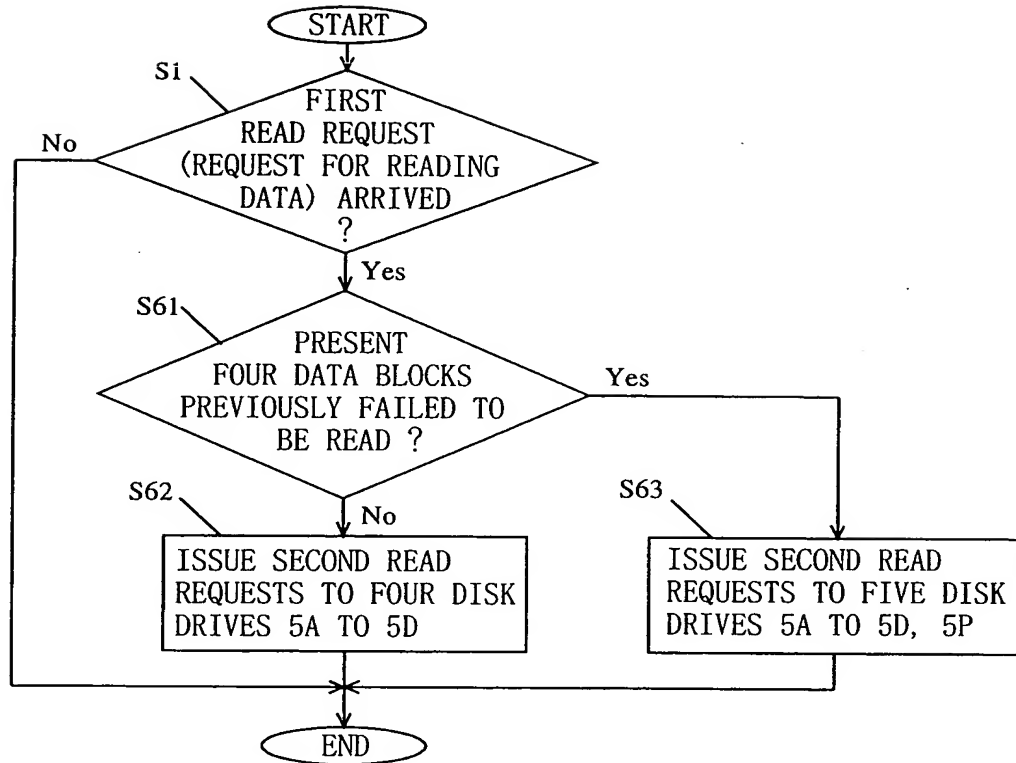


FIG. 22

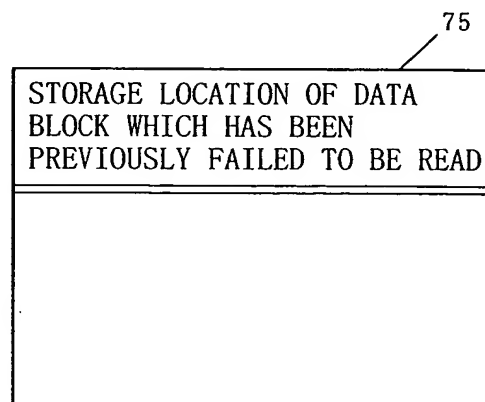


FIG. 23 a

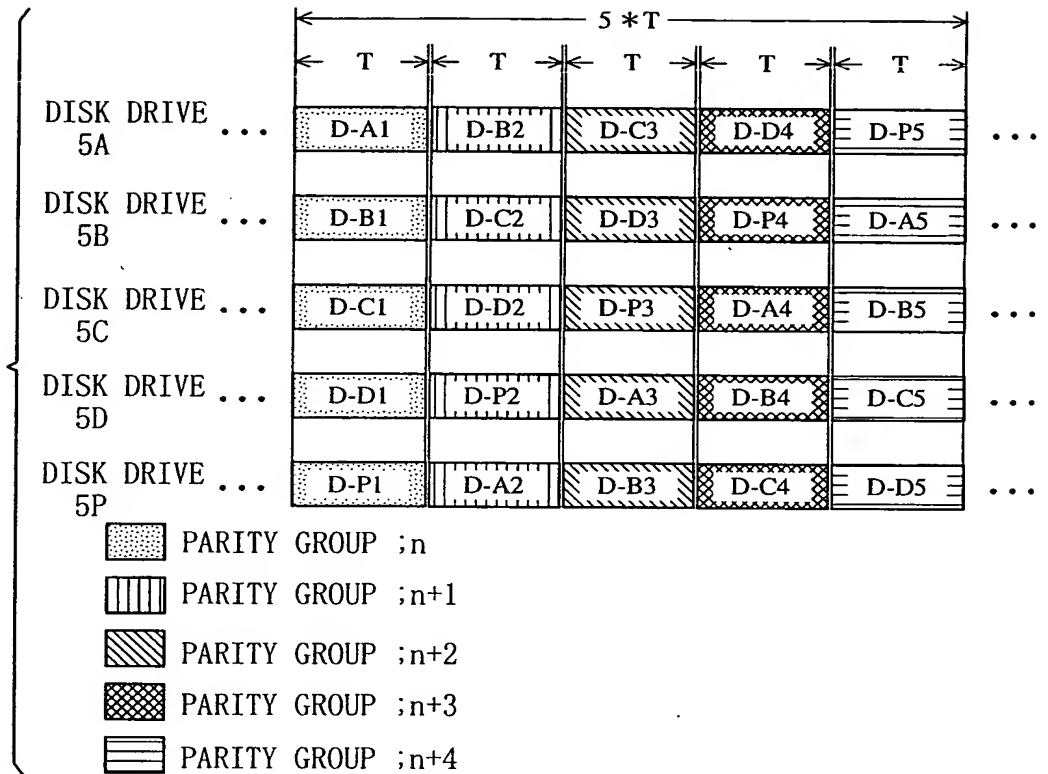


FIG. 23 b

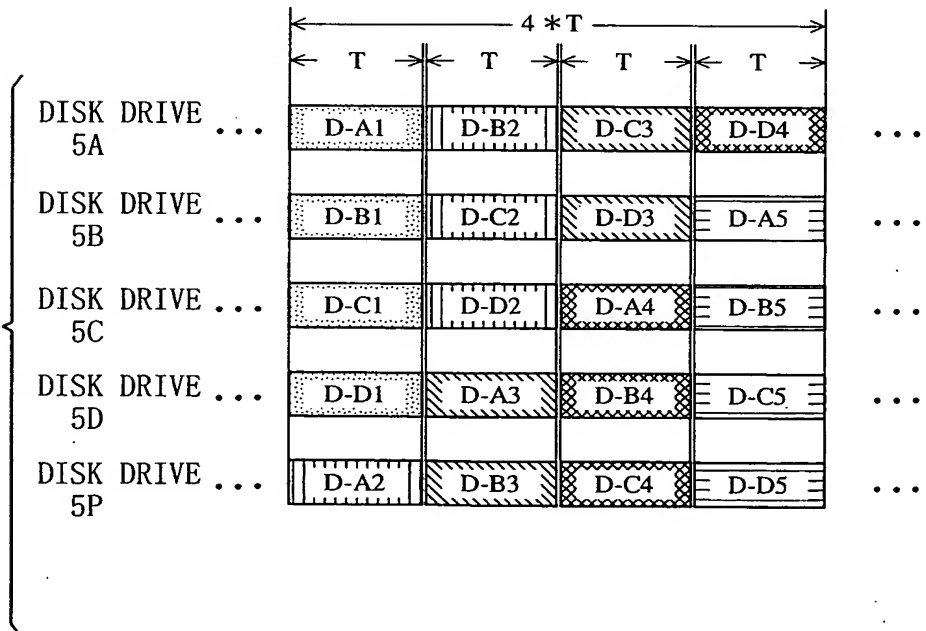


FIG. 24

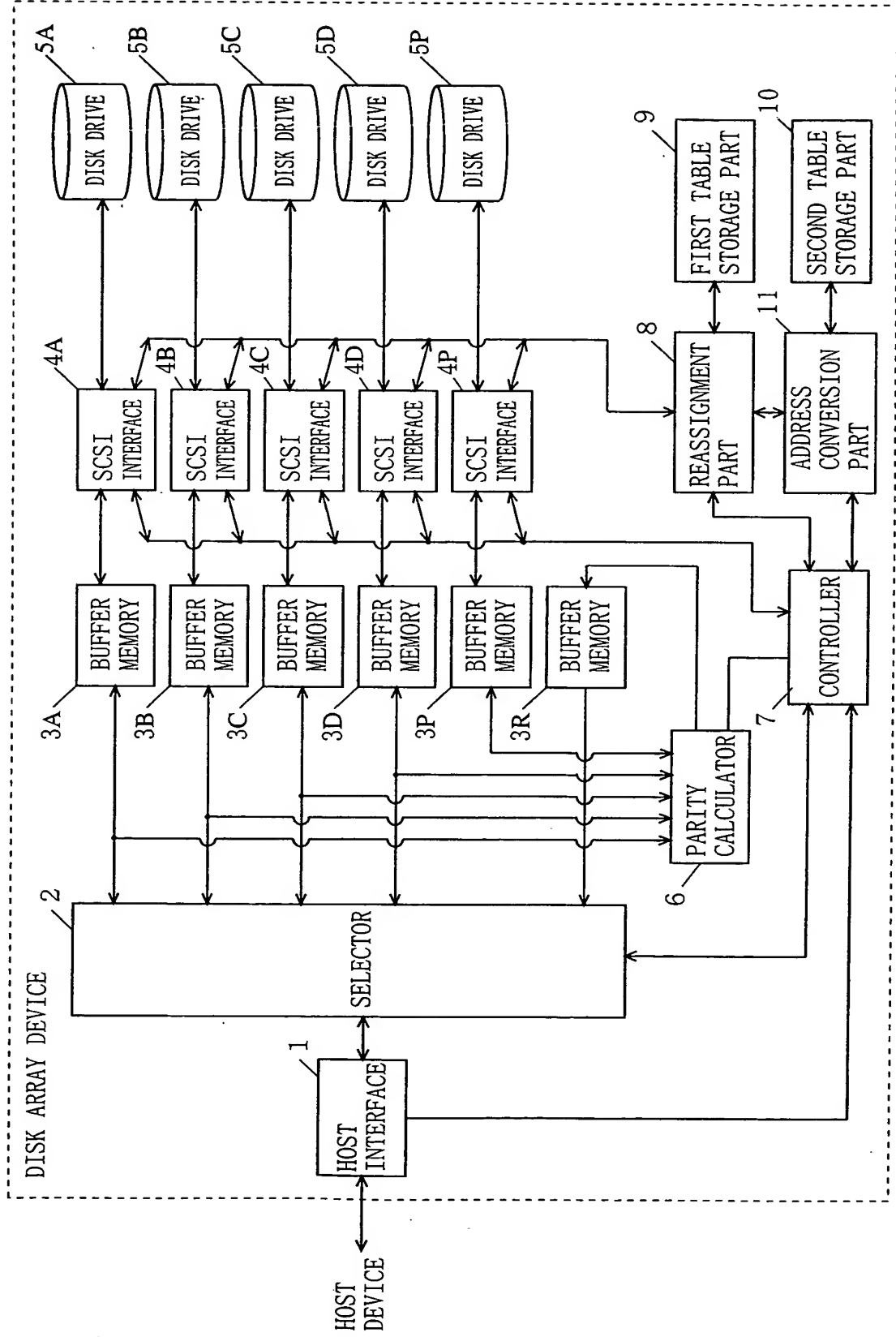


FIG. 25

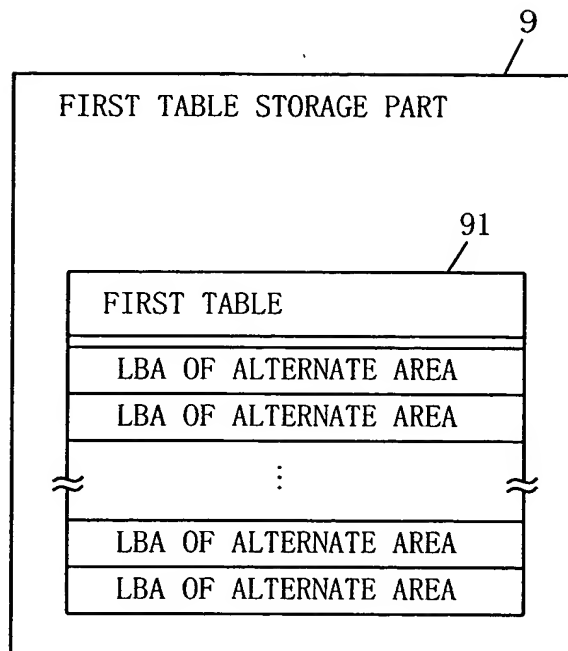




FIG. 26

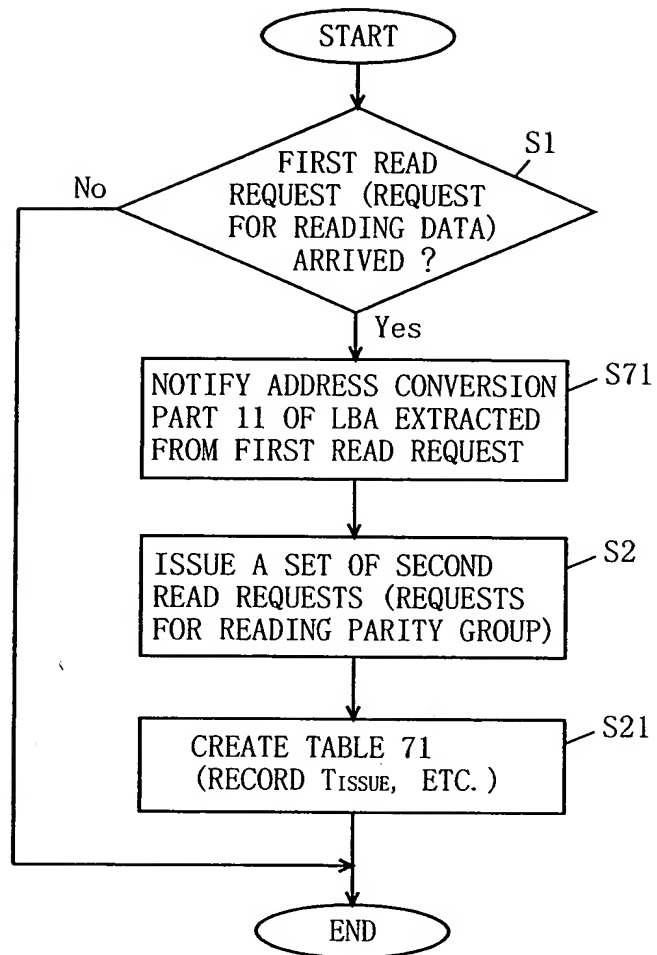


FIG. 27

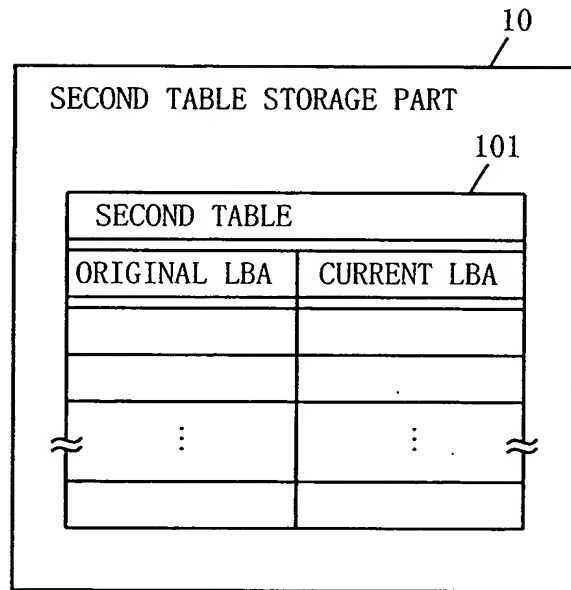


FIG. 28

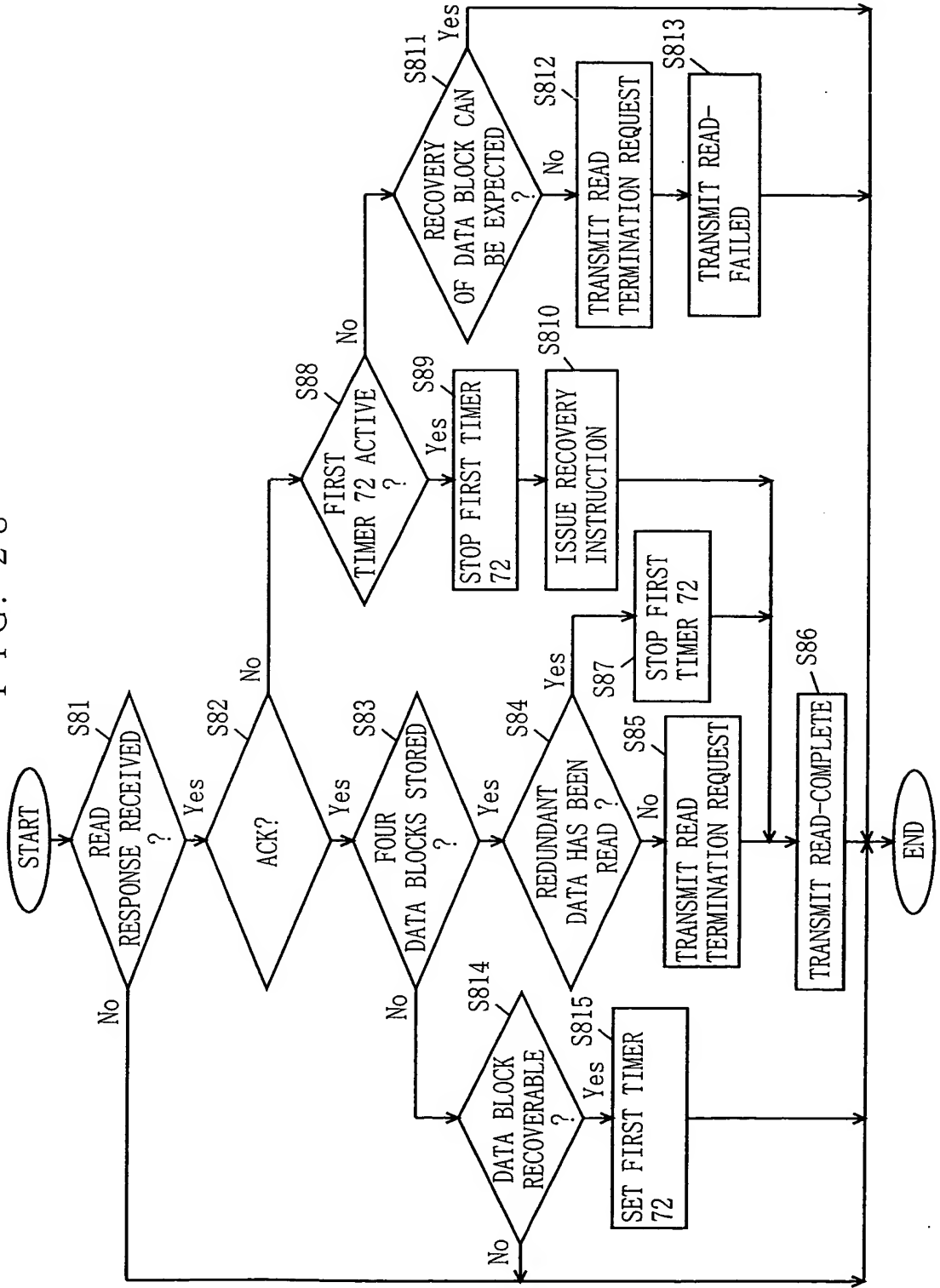


FIG. 29

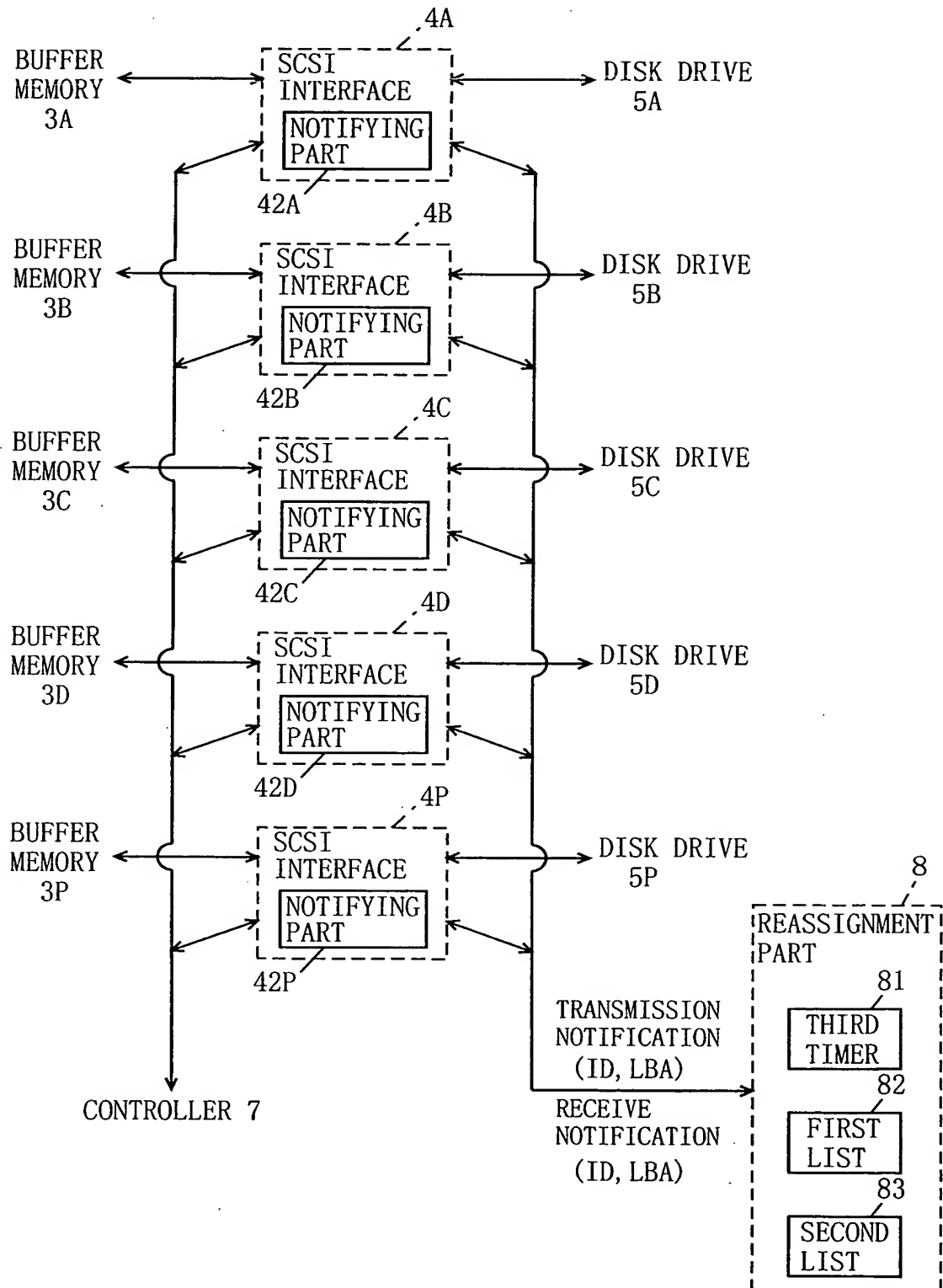


FIG. 30

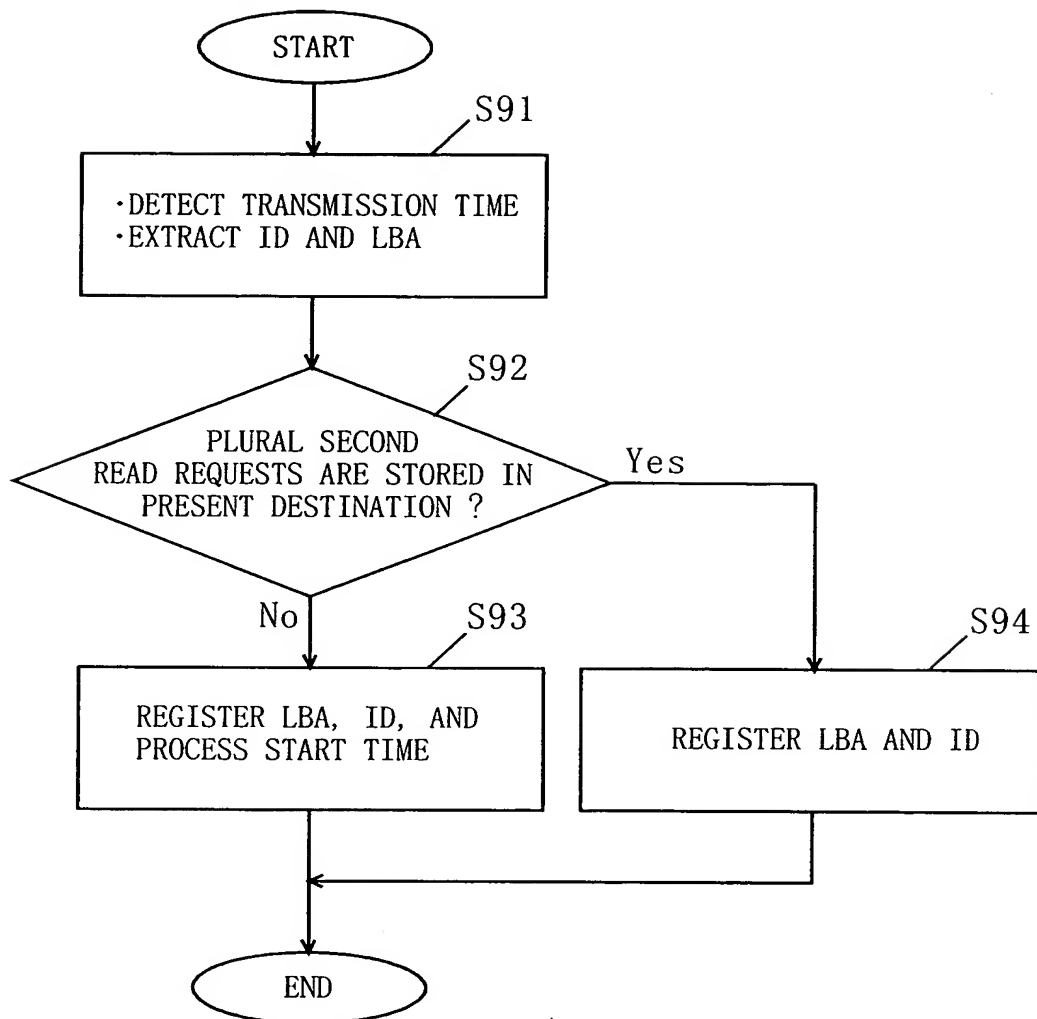


FIG. 31

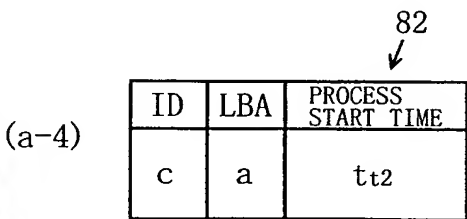
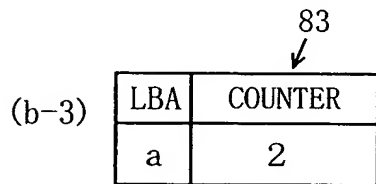
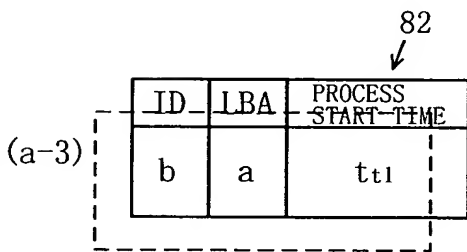
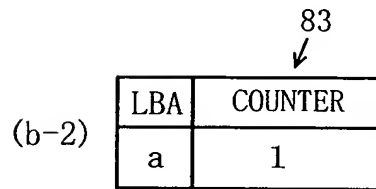
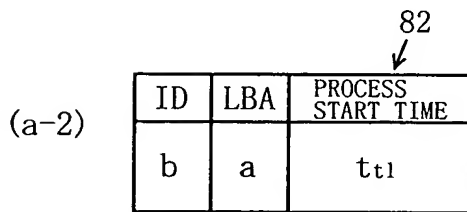
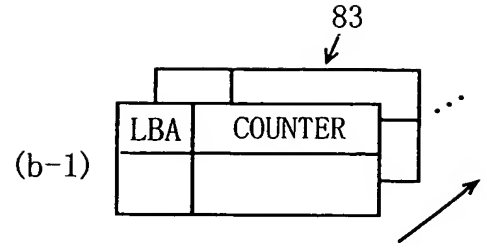
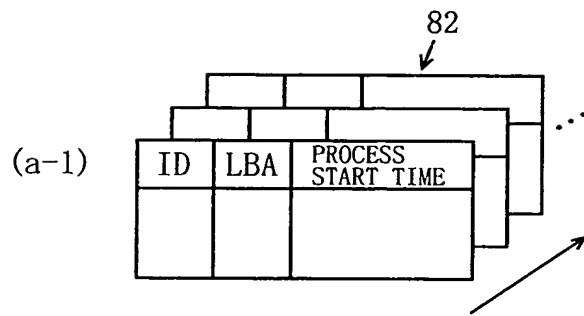


FIG. 32

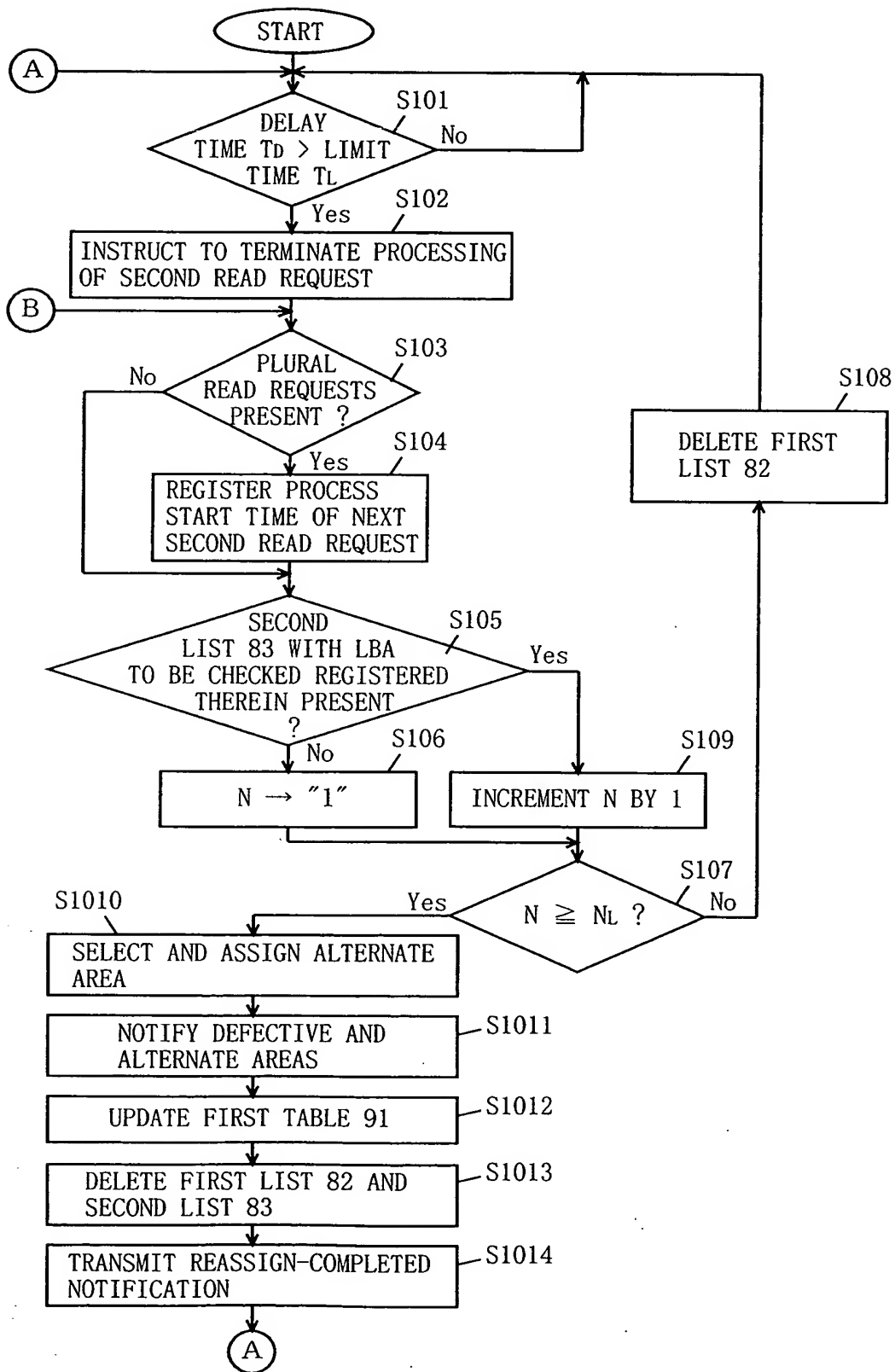


FIG. 33

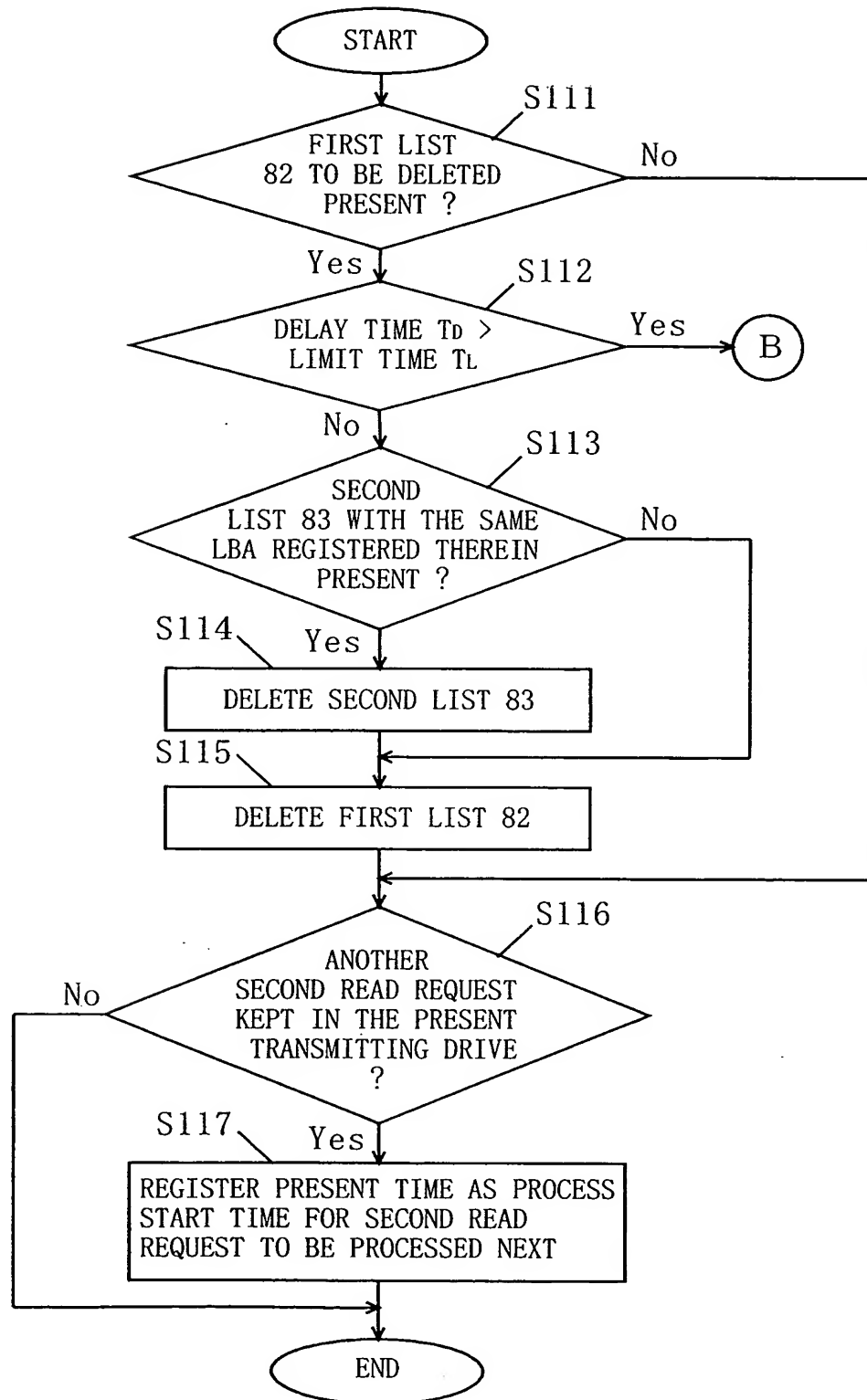




FIG. 34

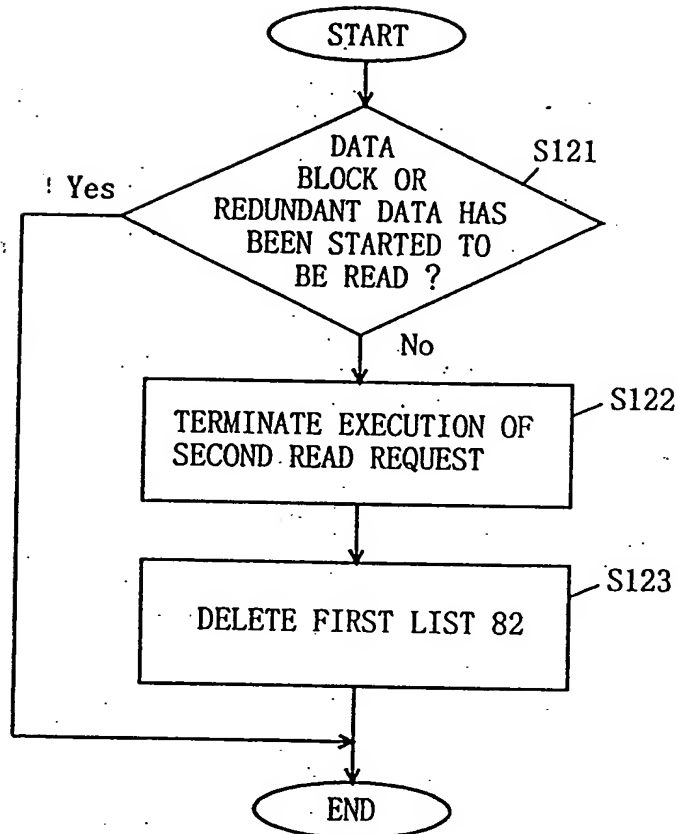


FIG. 35

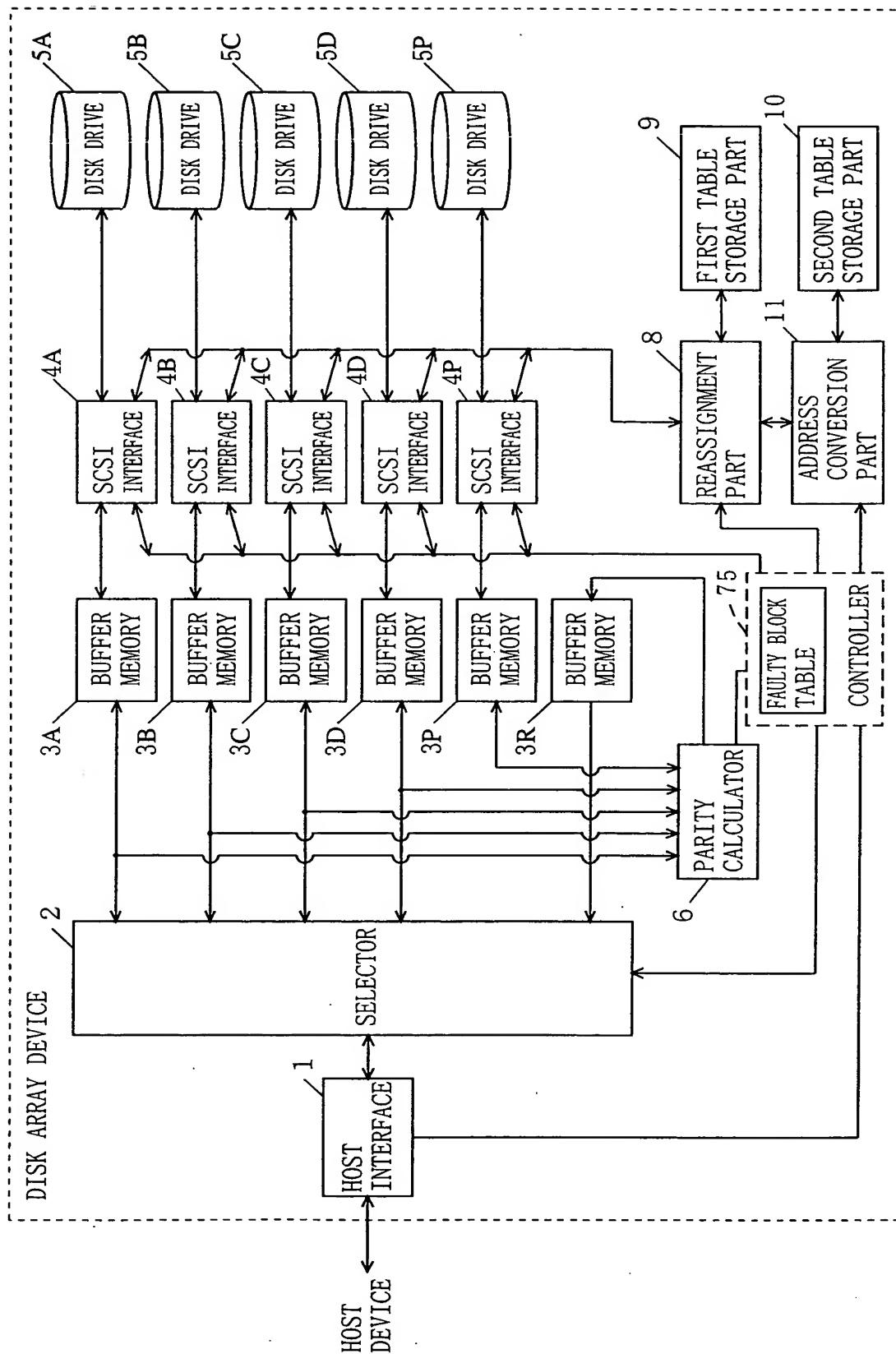


FIG. 36

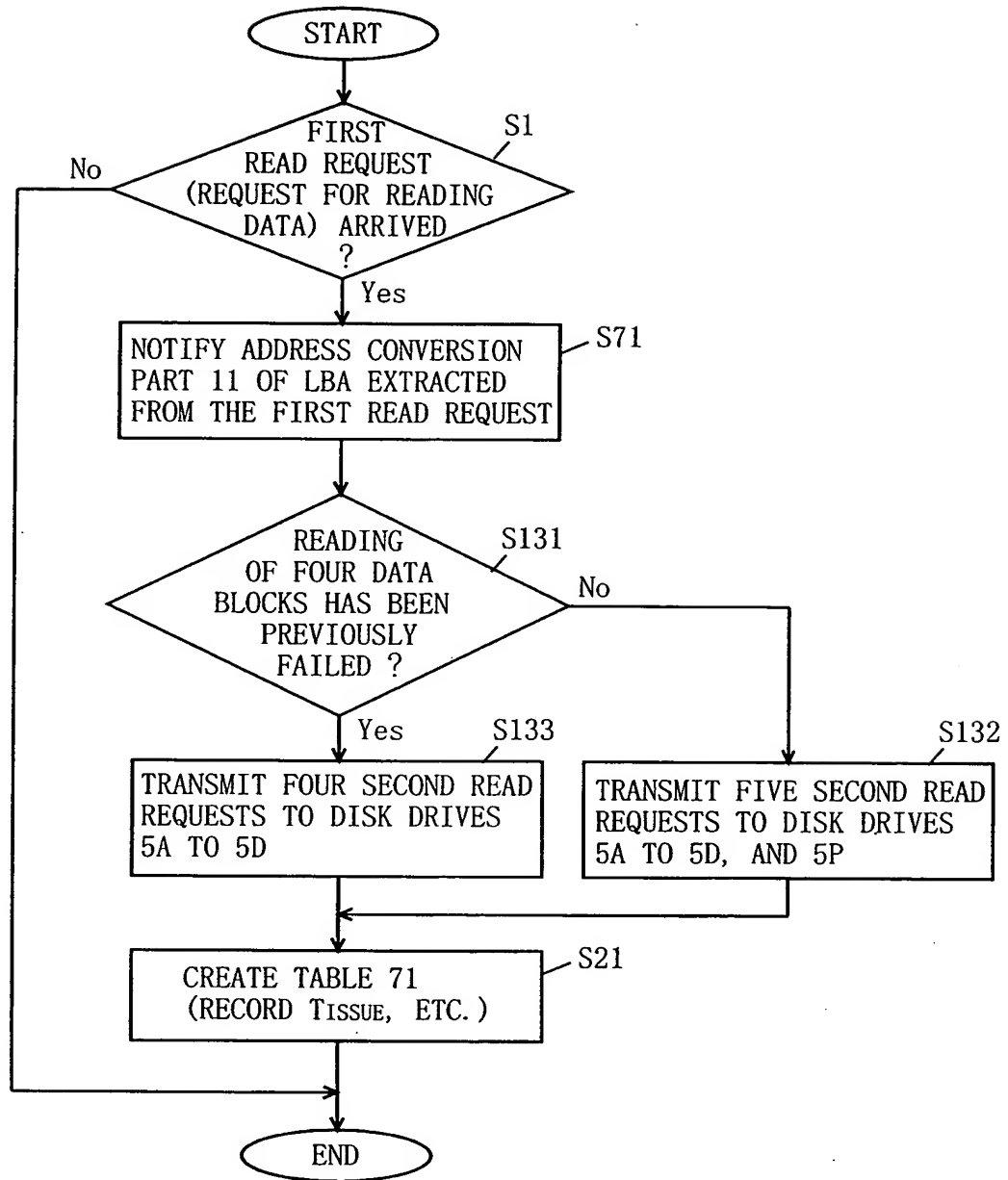


FIG. 37

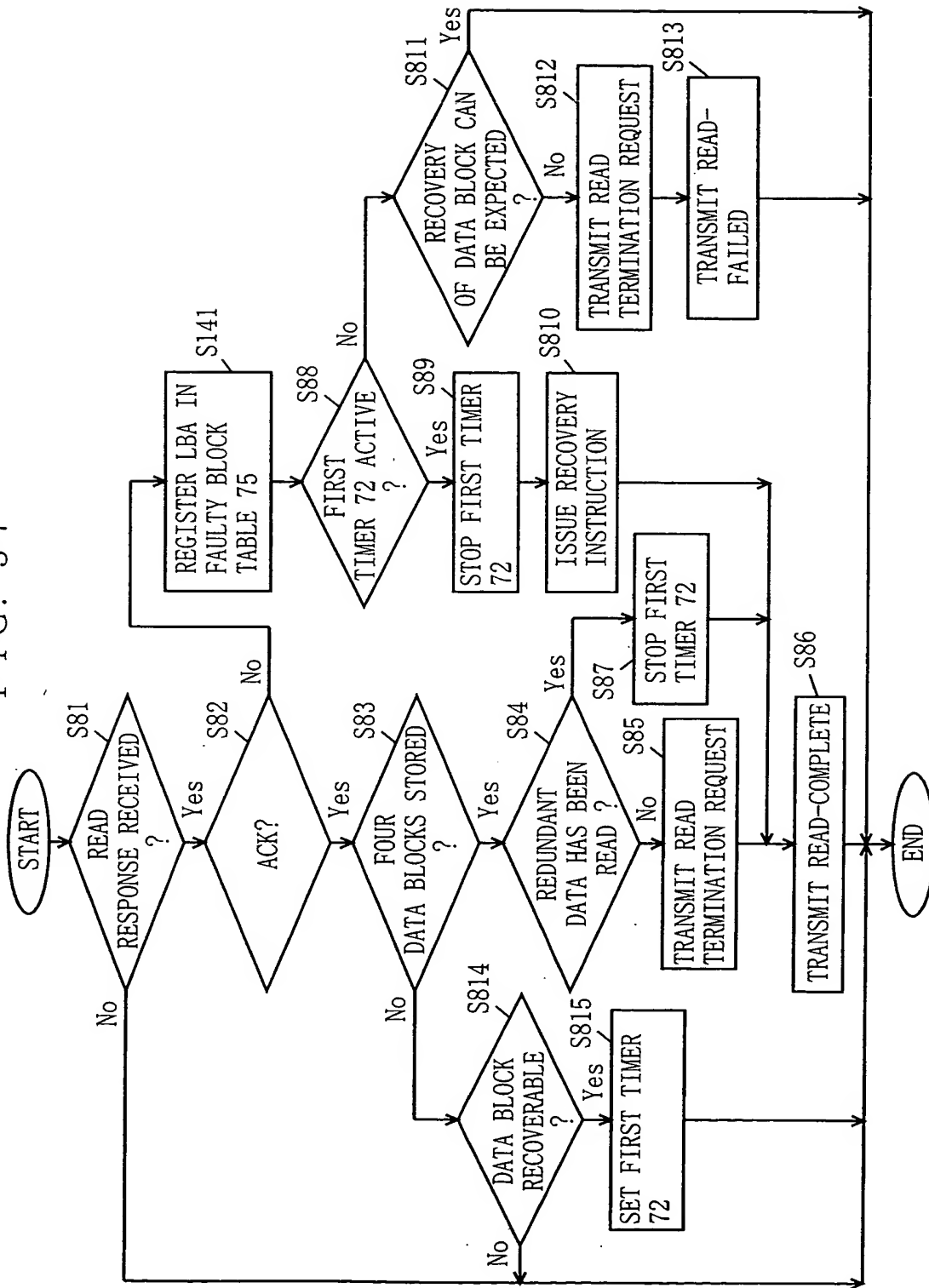


FIG. 38

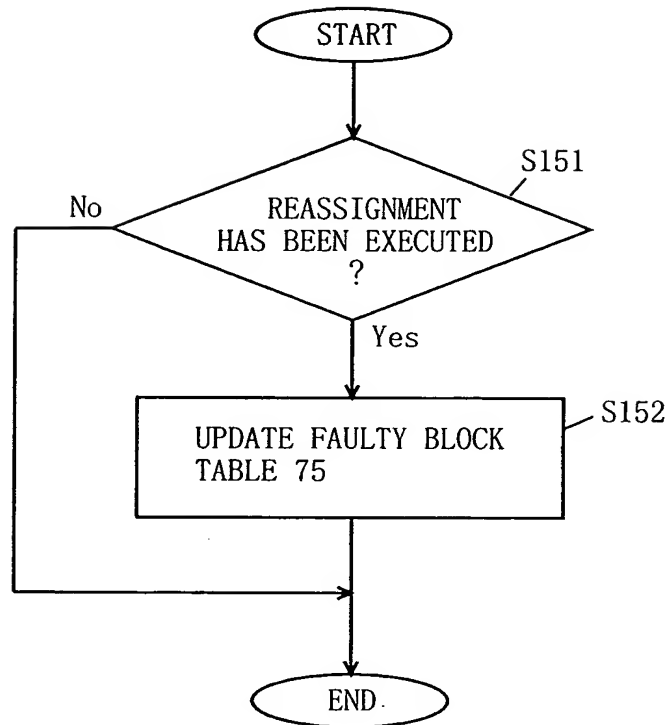


FIG. 39

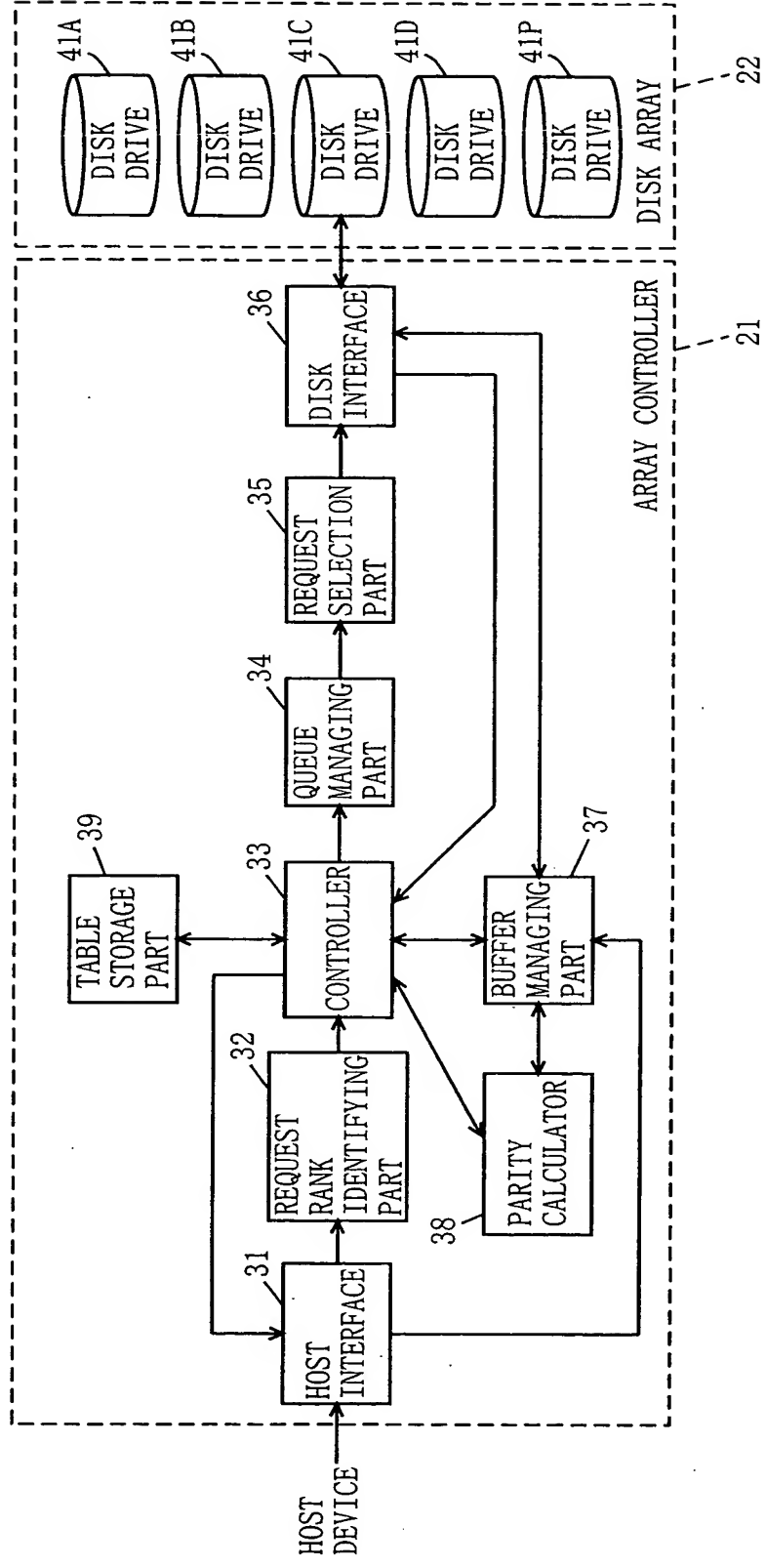


FIG. 40

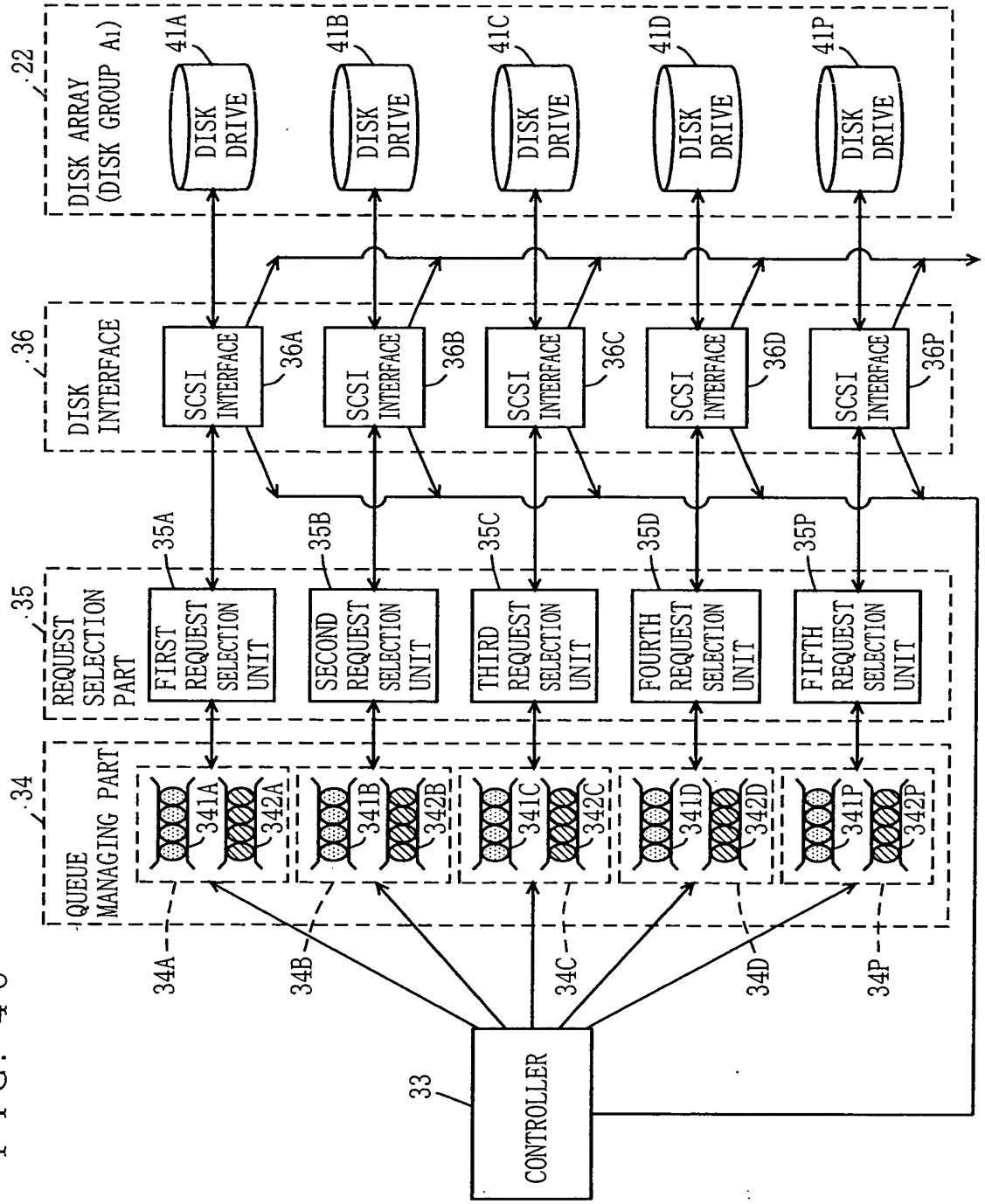
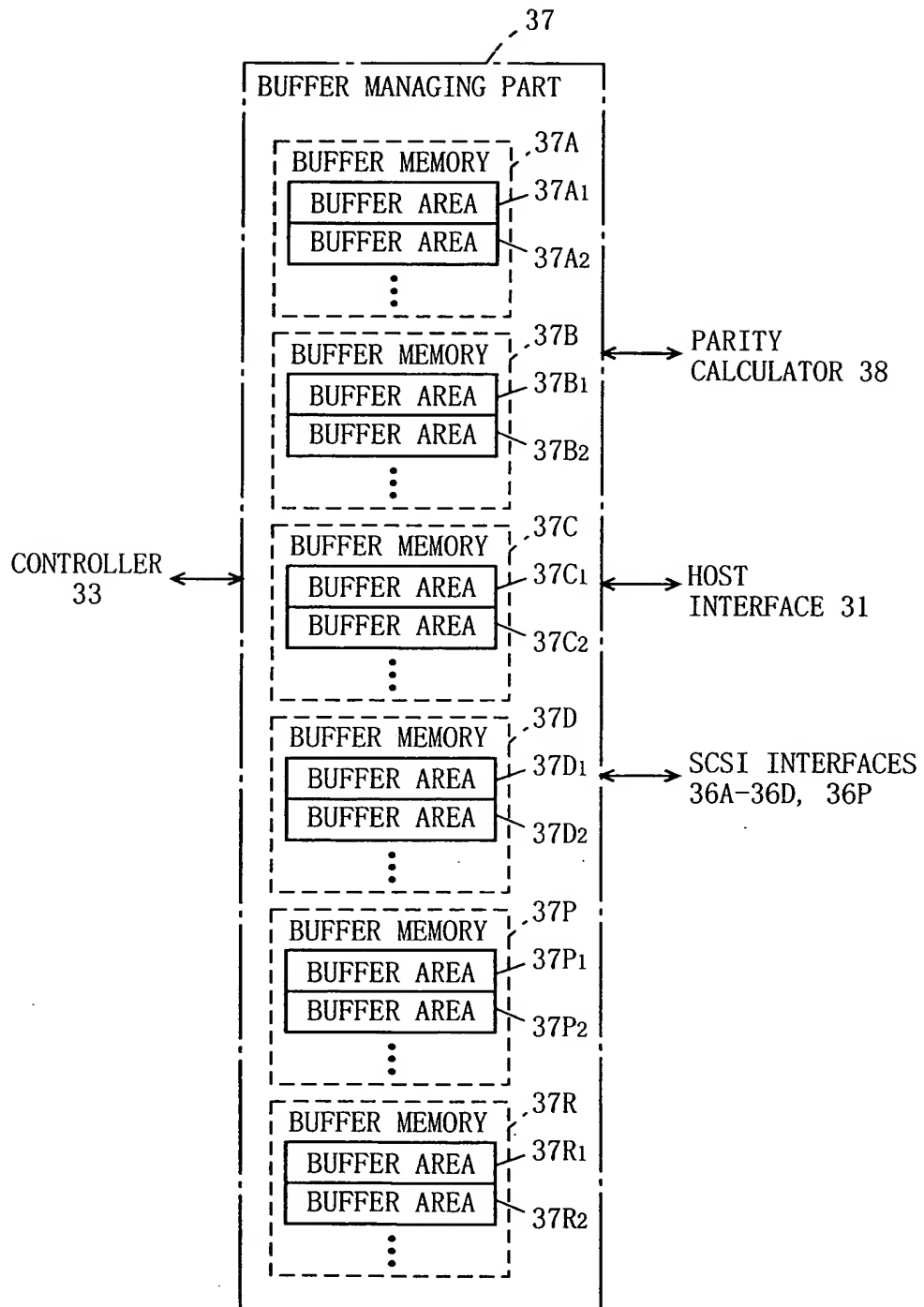


FIG. 41





F I G. 4 2 a

BYTE	BIT							
	7	6	5	4	3	2	1	0
0	1	1	0	0	0	LUN		

Identify (SCSI MESSAGE)

F I G. 4 2 b

BYTE	BIT							
	7	6	5	4	3	2	1	0
0	20h							
1	QUEUE TAG							

Queue\_Tag (SCSI MESSAGE)

FIG. 43 a

BIT BYTE	7	6	5	4	3	2	1	0
0	2Bh (OPERATION CODE)							
1	LUN			DPO	FUA	Reserved		RelAdr
2	(MSB)							
3	LOGICAL BLOCK ADDRESS							
4								
5								
6								
7	(LSB)							
8	Reserved							
9	(MSB)							
10	TRANSFER DATA LENGTH							
11								
12	(LSB)							
13	CONTROL BYTE							

Read\_IO (SCSI COMMAND)

FIG. 43 b

BIT BYTE	7	6	5	4	3	2	1	0
0	2Ah (OPERATION CODE)							
1	LUN			DPO	FUA	Reserved		RelAdr
2	(MSB)							
3	LOGICAL BLOCK ADDRESS							
4								
5								
6								
7	(MSB)							
8	TRANSFER DATA LENGTH							
9	(LSB)							
10	CONTROL BYTE							

Write\_IO (SCSI COMMAND)

FIG. 44

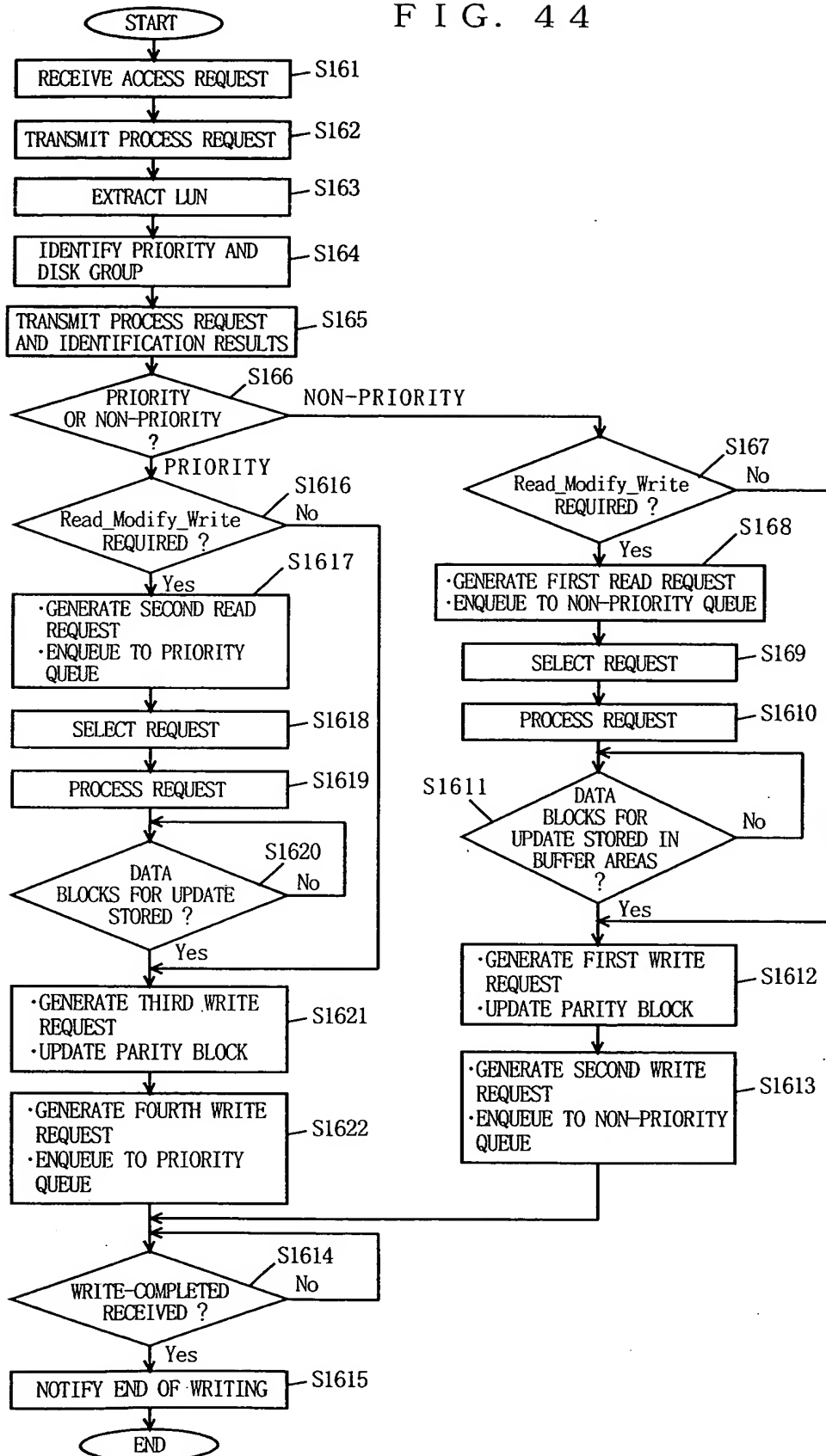


FIG. 45

BYTE	BIT							
	7	6	5	4	3	2	1	0
0	COMMAND TYPE							
1	IDENTIFICATION NUMBER ★ 1							
2	LUN				CONTROL INFORMATION			
3	(MSB) LOGICAL BLOCK ADDRESS (LBA)							
4	LOGICAL BLOCK ADDRESS (LBA)							
5	LOGICAL BLOCK ADDRESS (LBA)							
6	LOGICAL BLOCK ADDRESS (LBA) (LSB)							
7	(MSB) DATA LENGTH							
8	DATA LENGTH (LSB)							
:	DATA							

FIG. 46

BYTE	BIT							
	7	6	5	4	3	2	1	0
0	COMMAND TYPE							
1	IDENTIFICATION NUMBER ★ 1							
2	<u>PRIORITY</u>	<u>DISK</u>		<u>CONTROL INFORMATION</u>				
		GROUP NUMBER						
3	(MSB)	LOGICAL BLOCK ADDRESS (LBA)						
4	LOGICAL BLOCK ADDRESS (LBA)							
5	LOGICAL BLOCK ADDRESS (LBA)							
6	LOGICAL BLOCK ADDRESS (LBA) (LSB)							
7	(MSB)	DATA LENGTH						
8	DATA LENGTH (LSB)							
:	DATA							

FIG. 47

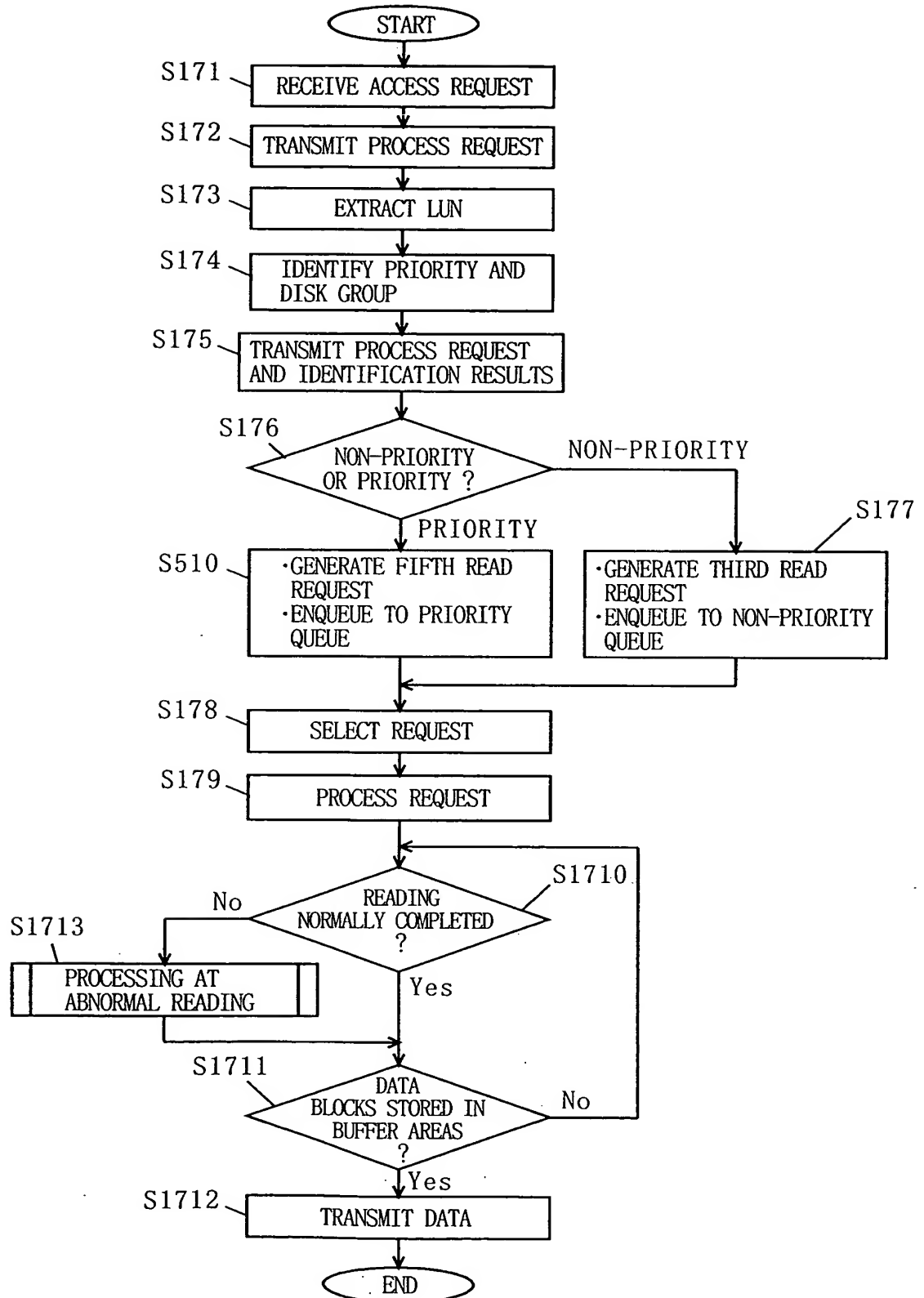


FIG. 48

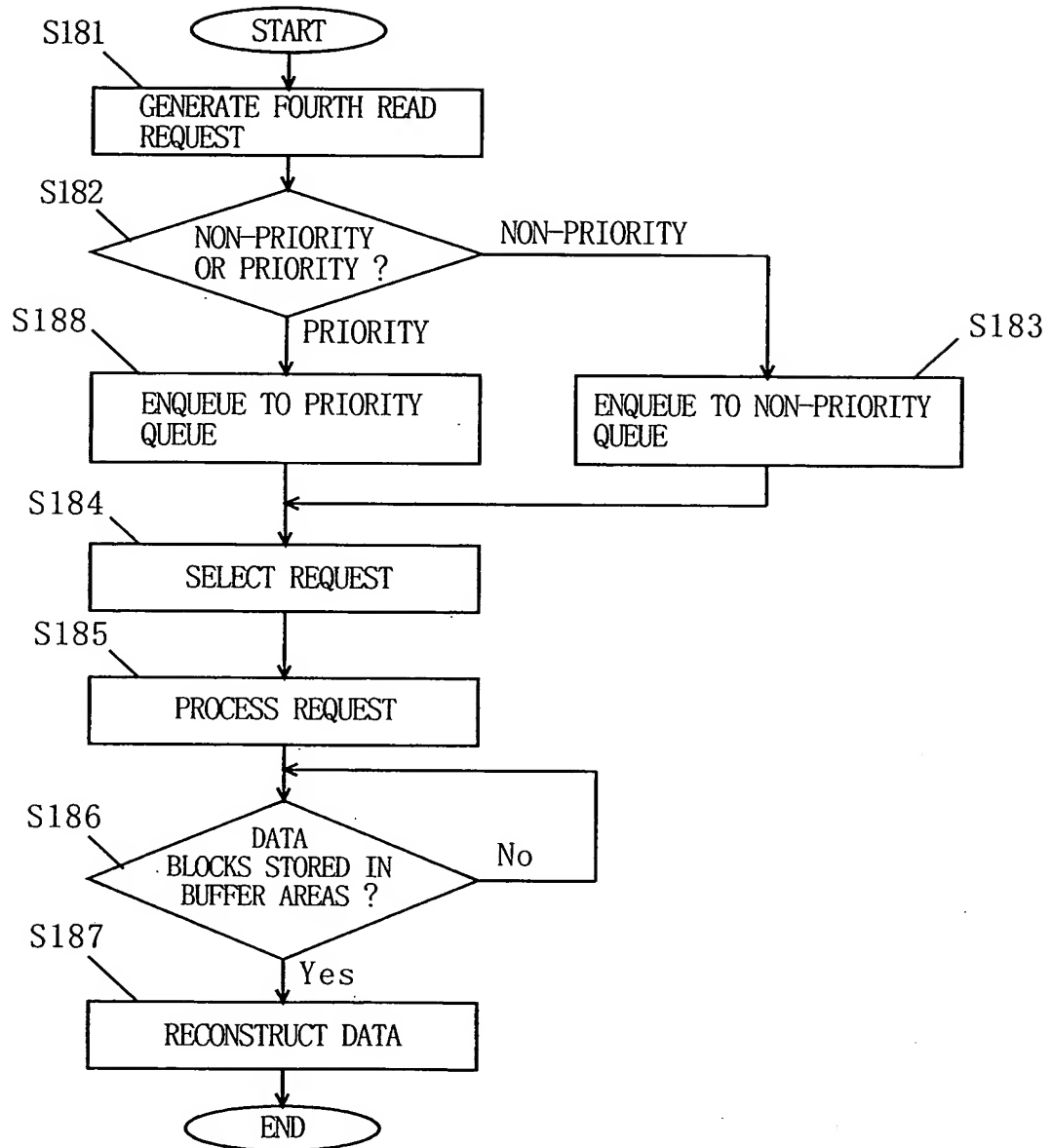
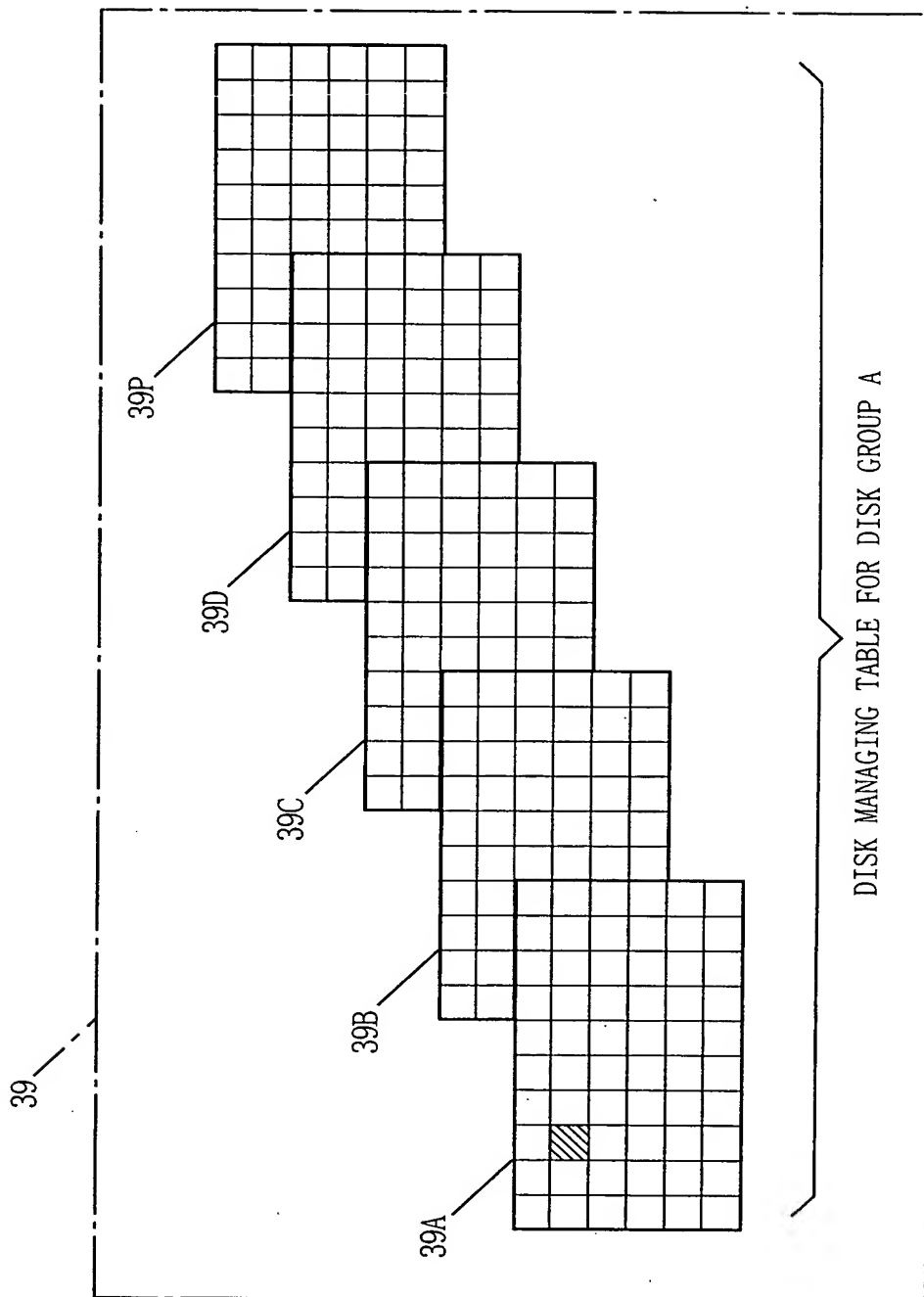


FIG. 49



3111~3115、

NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	RECONSTRUCTION
RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION
RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION
RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION
RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION	RECONSTRUCTION



FIG. 51

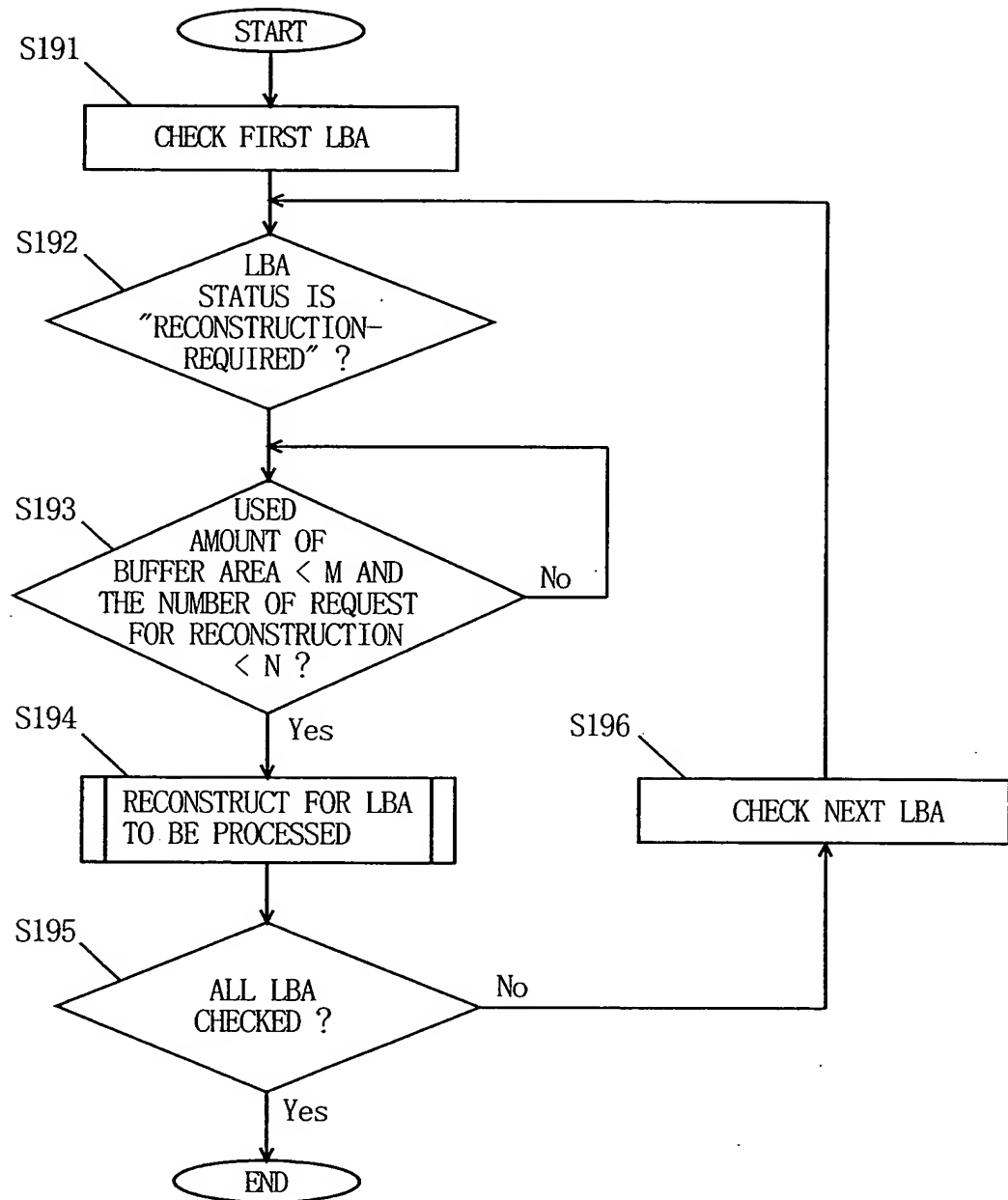


FIG. 52

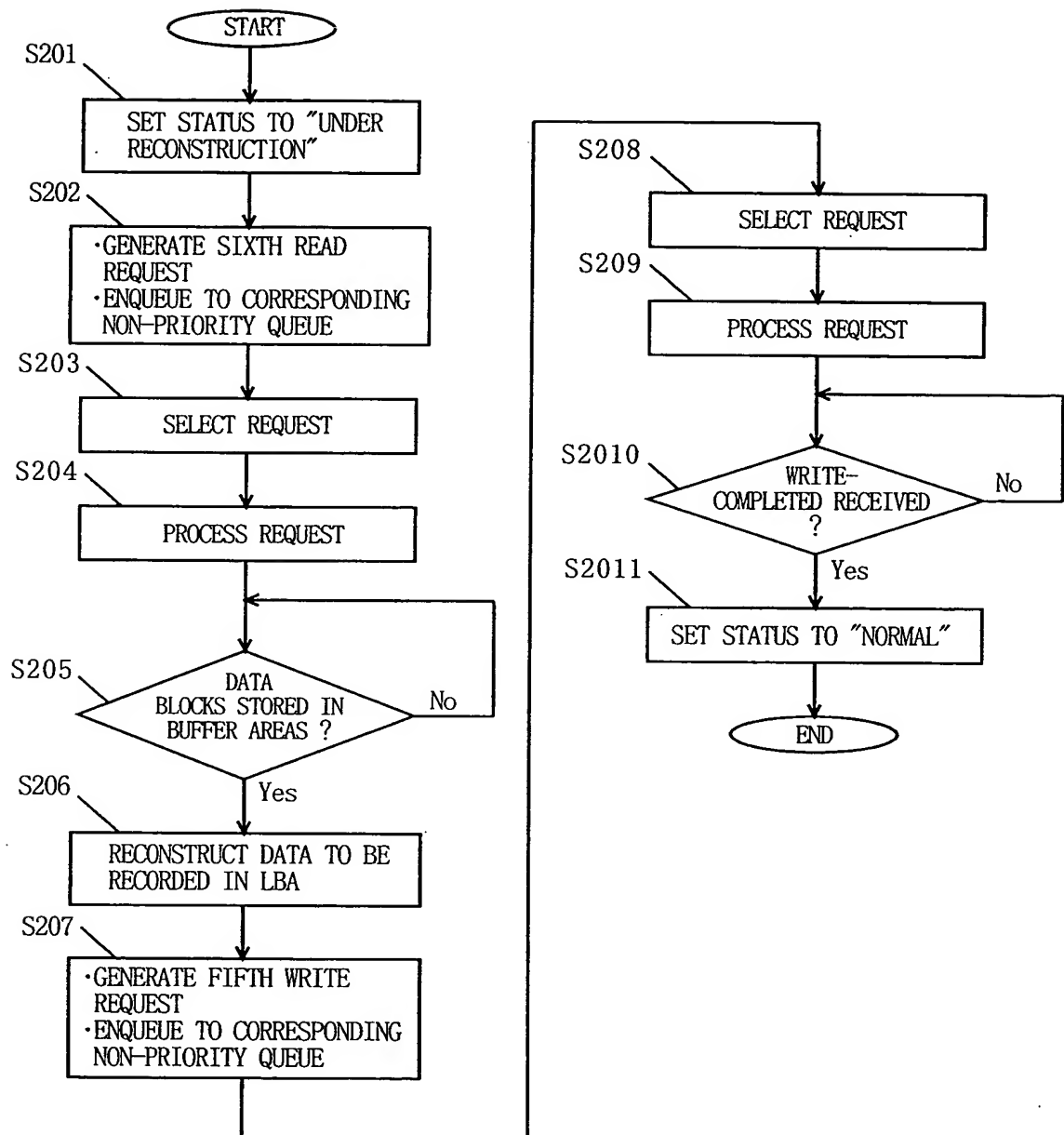


FIG. 53

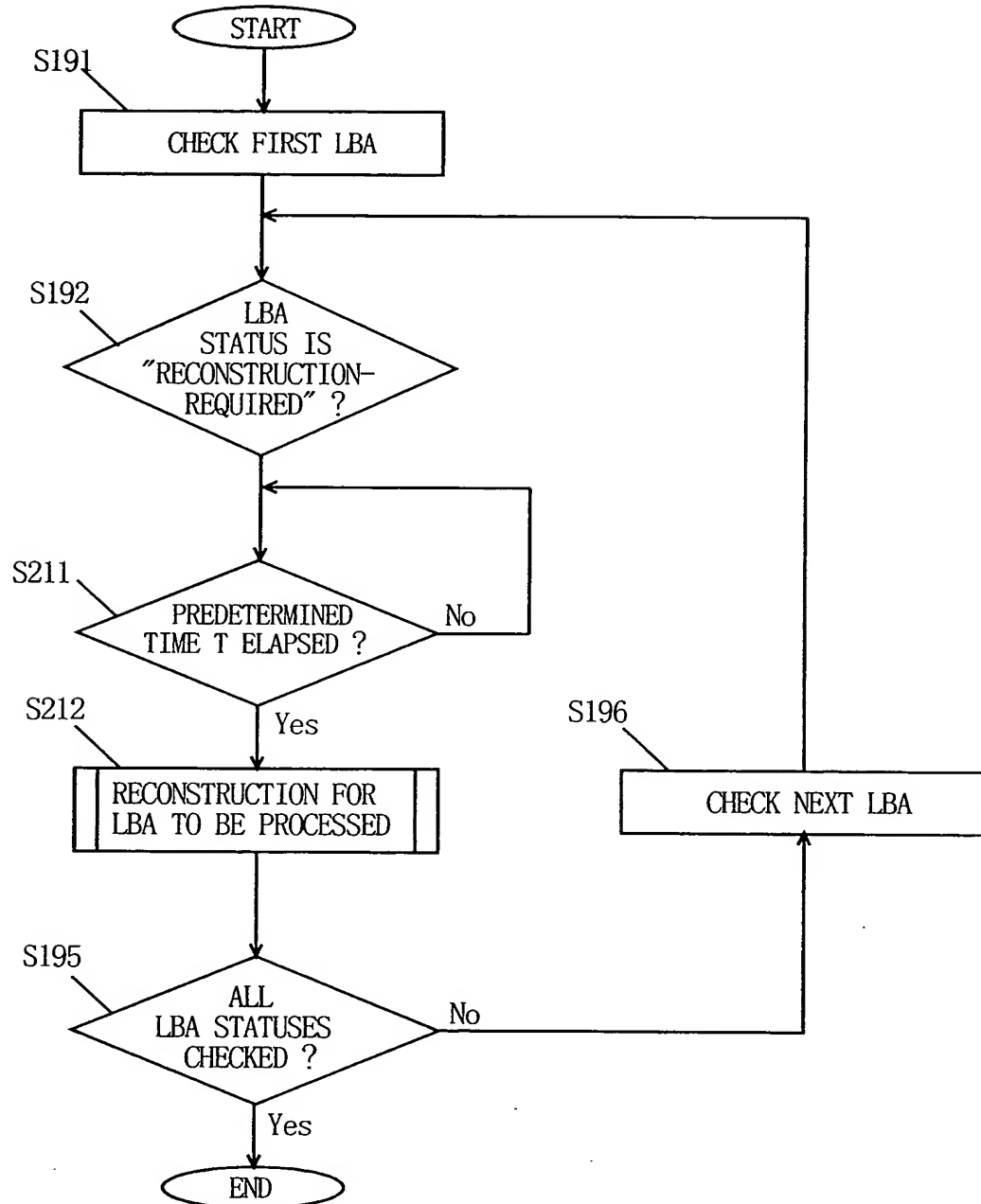


FIG. 54

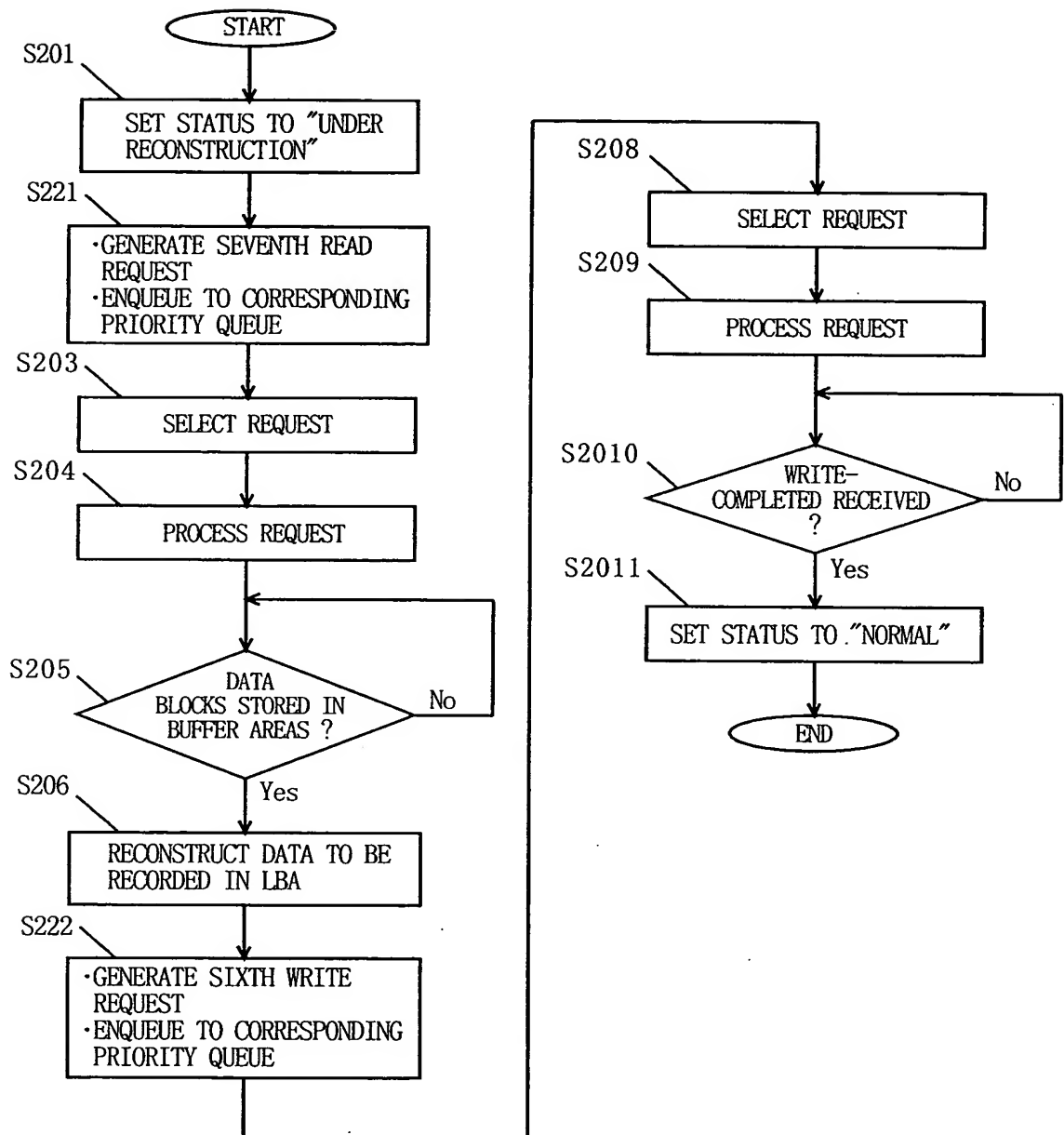


FIG. 55

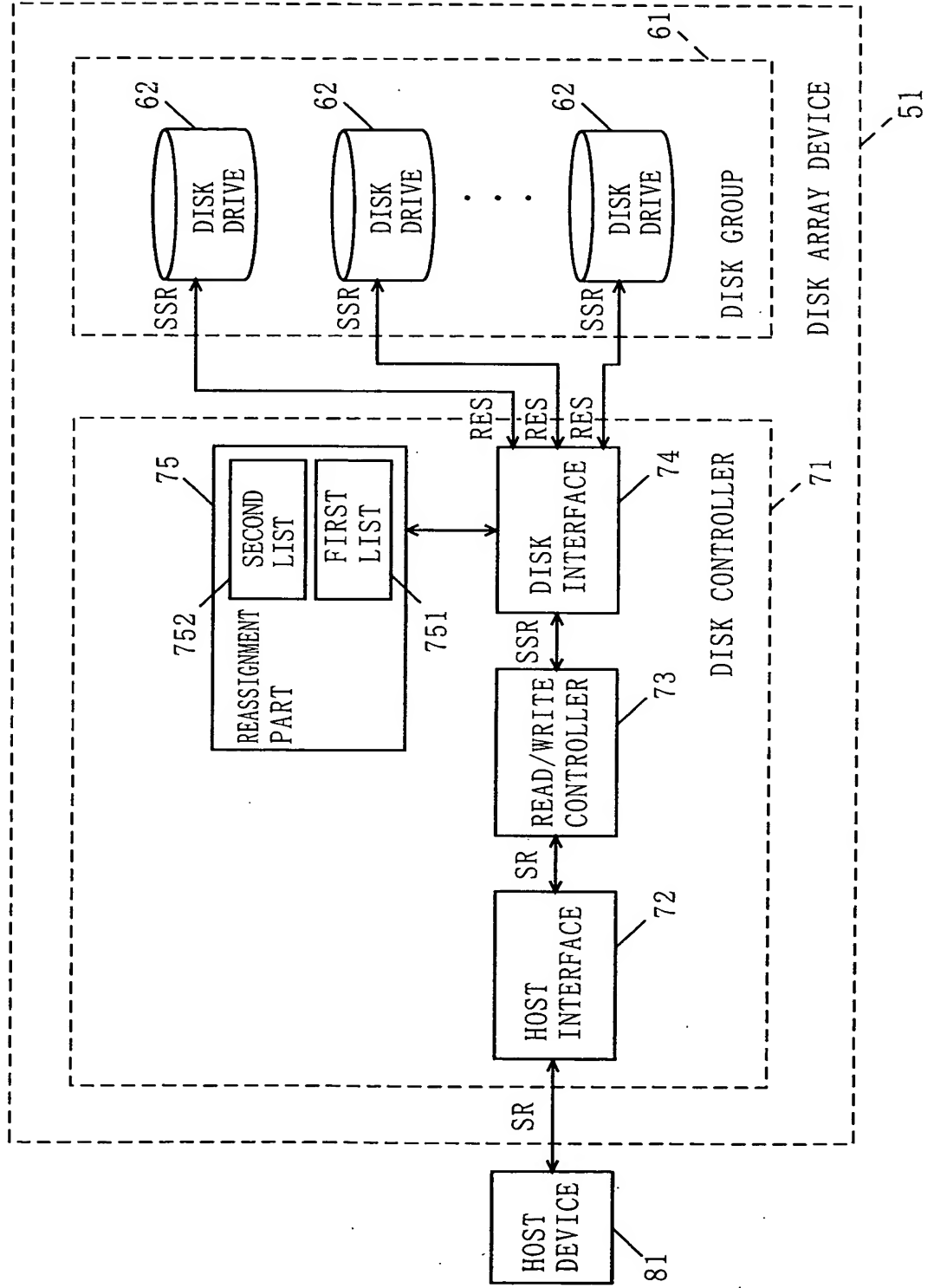


FIG. 56

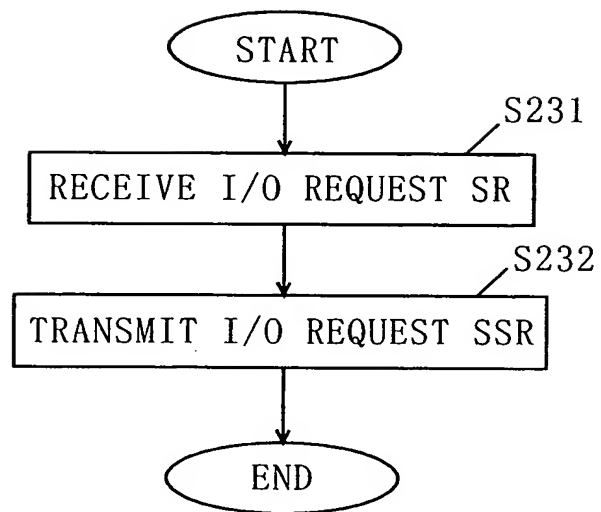


FIG. 57

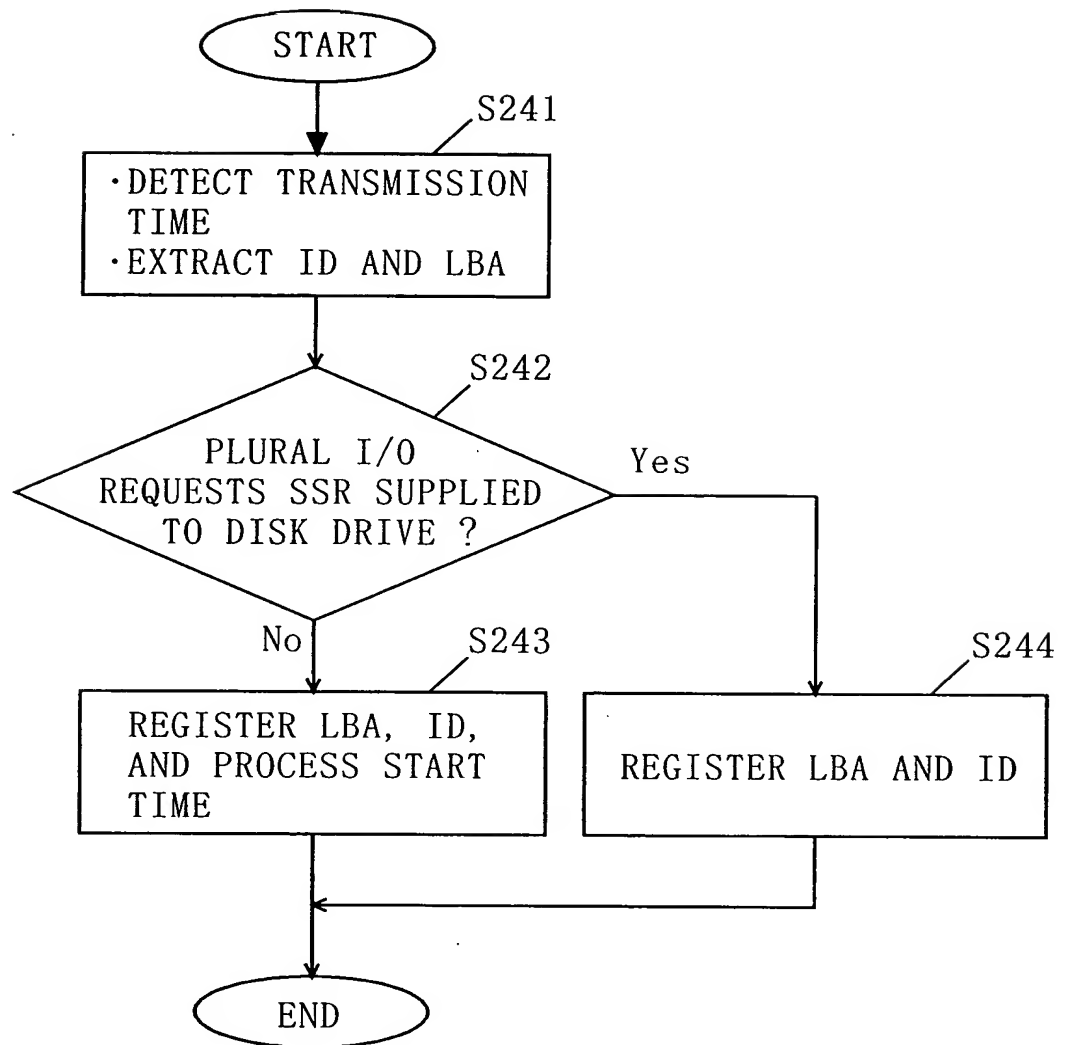


FIG. 58

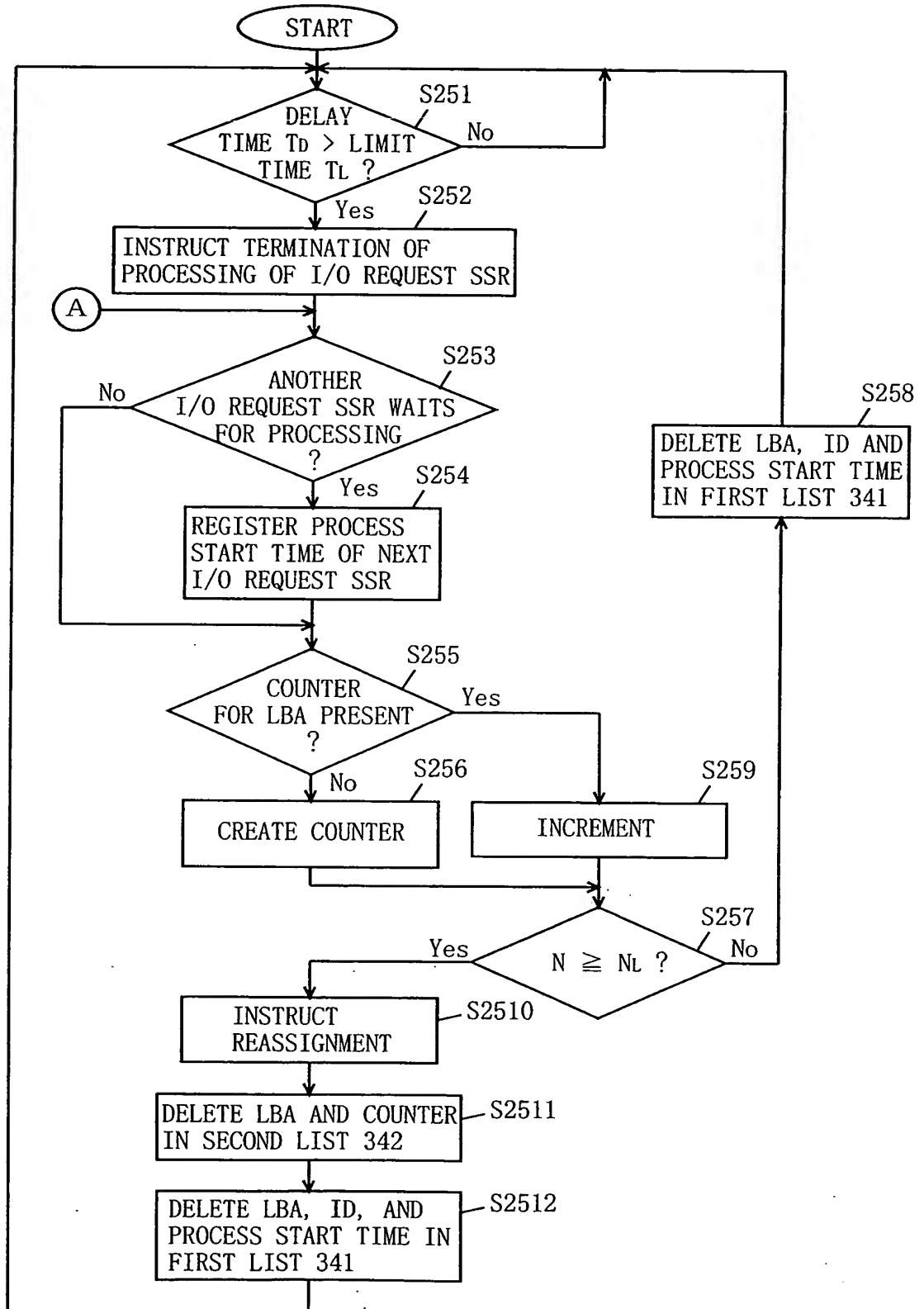




FIG. 59

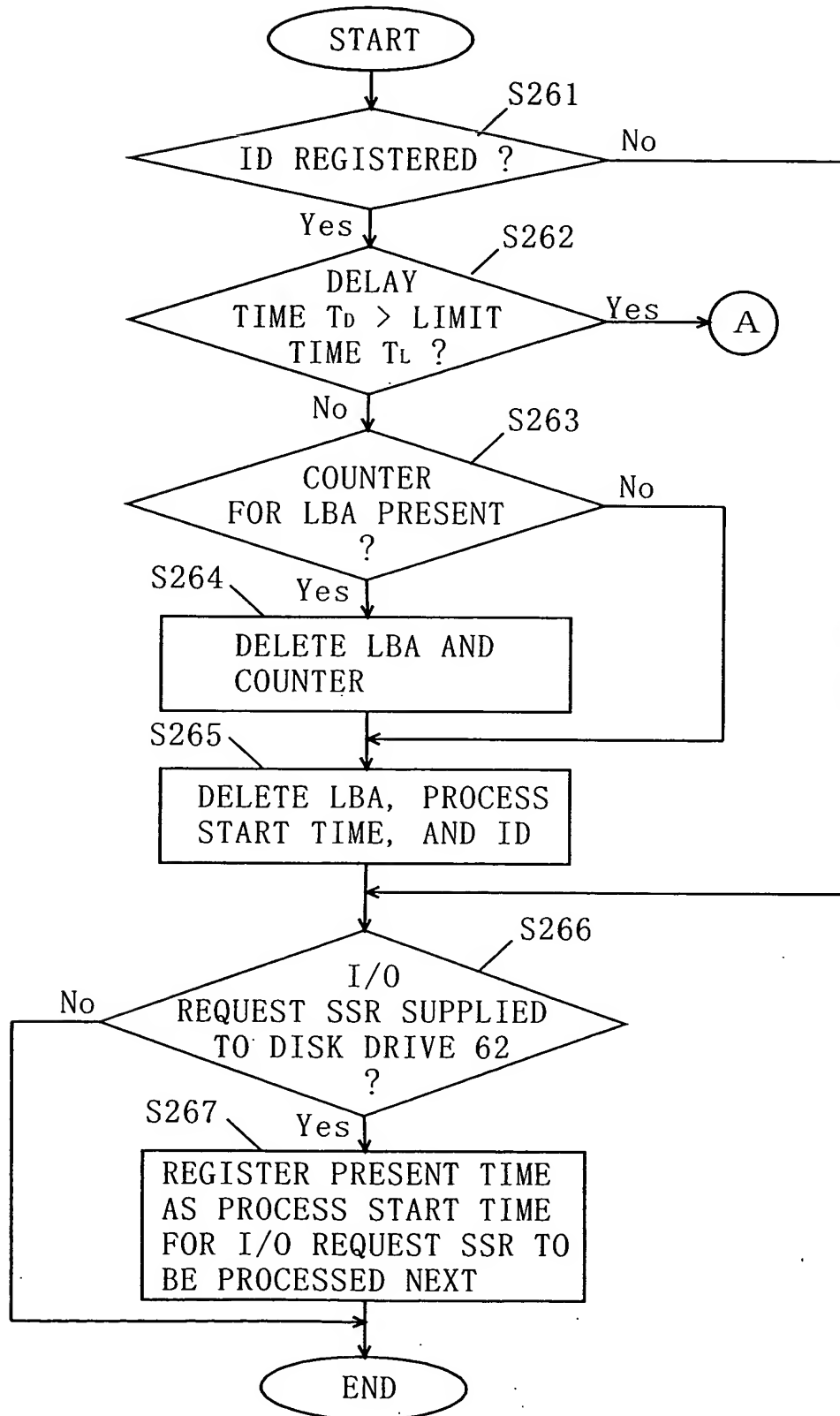


FIG. 60

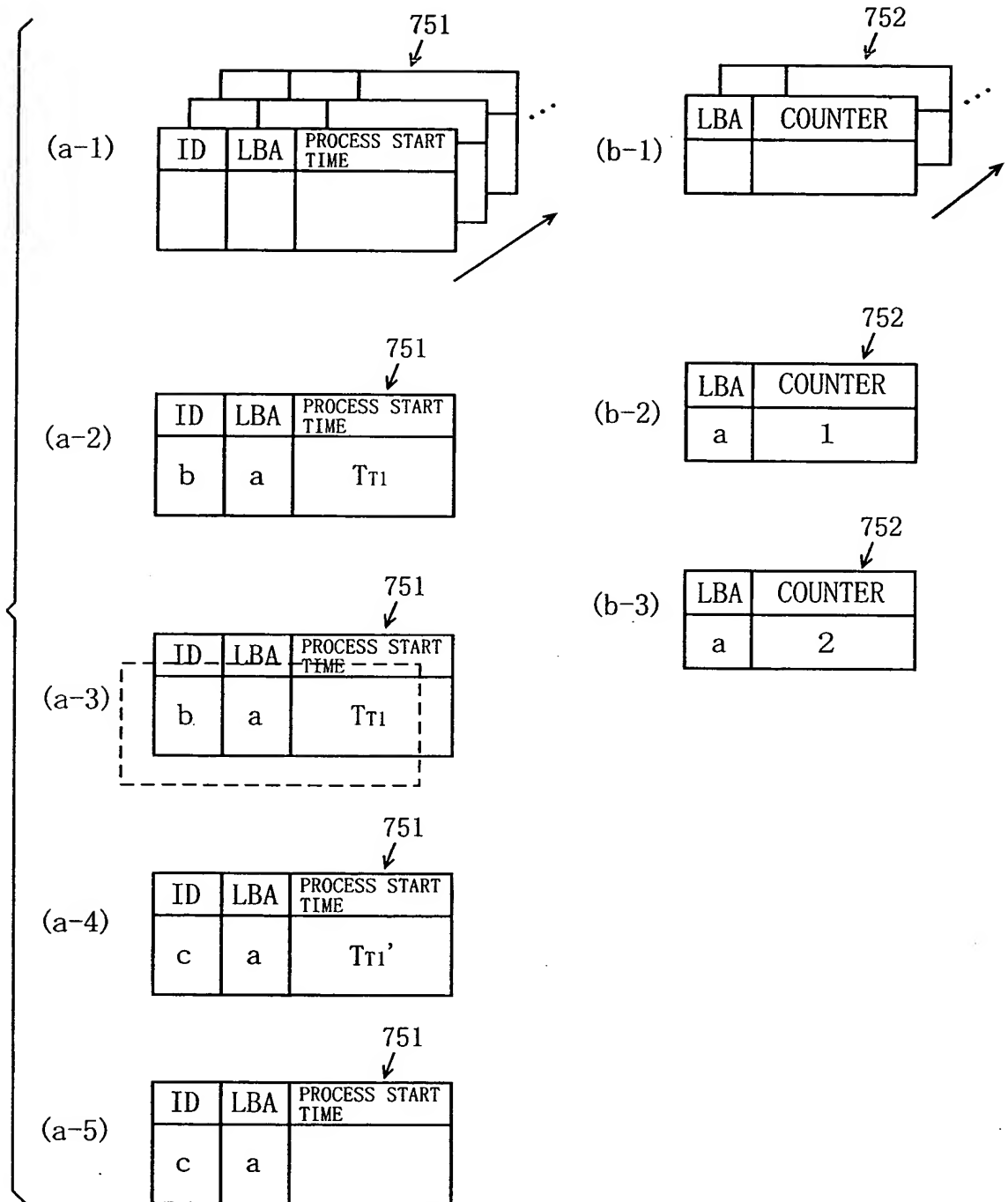




FIG. 62

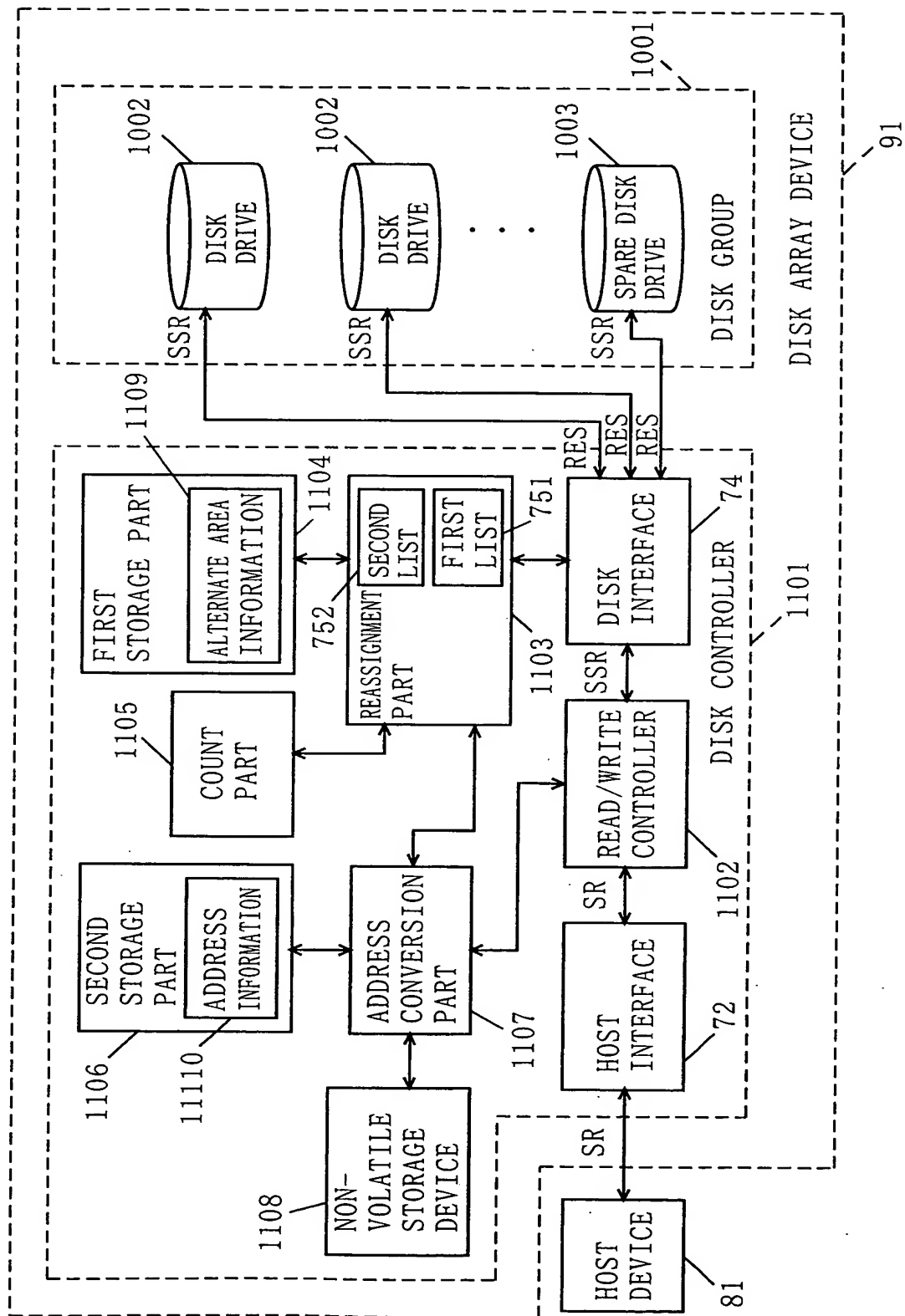


FIG. 63

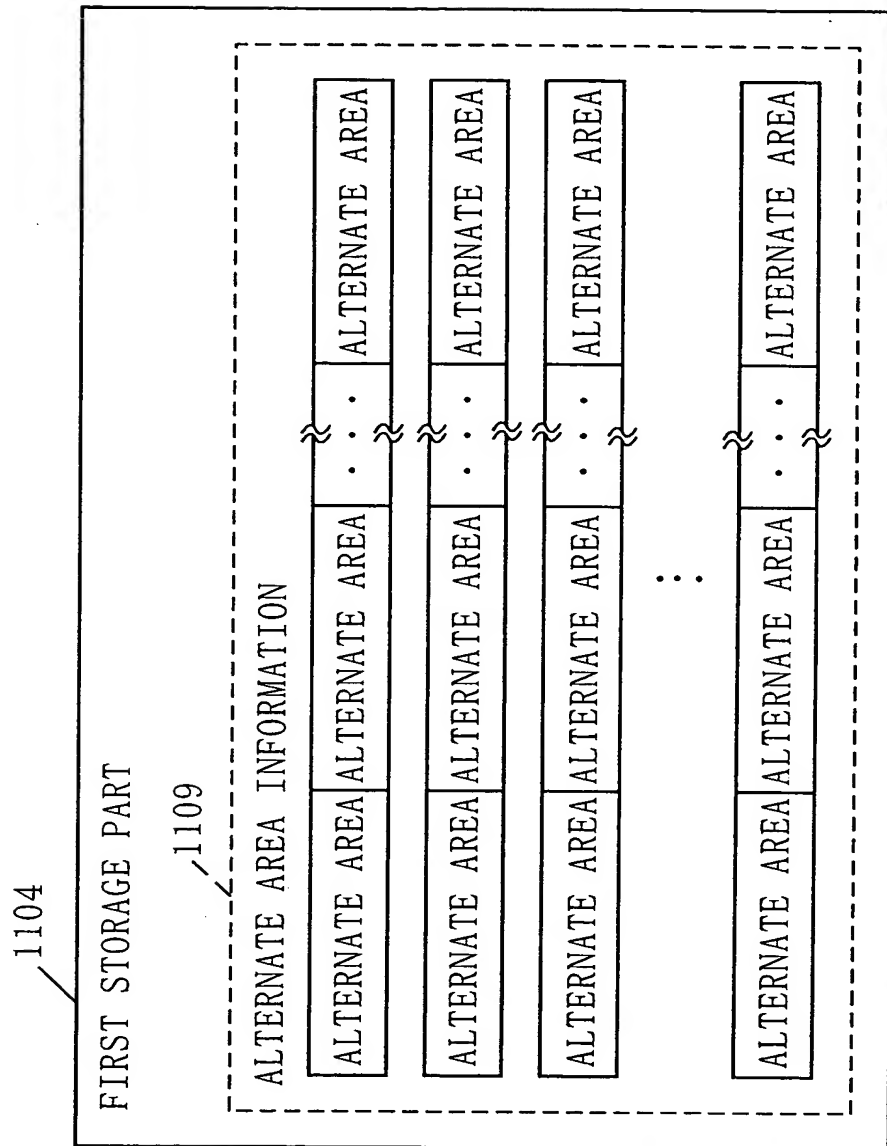


FIG. 64

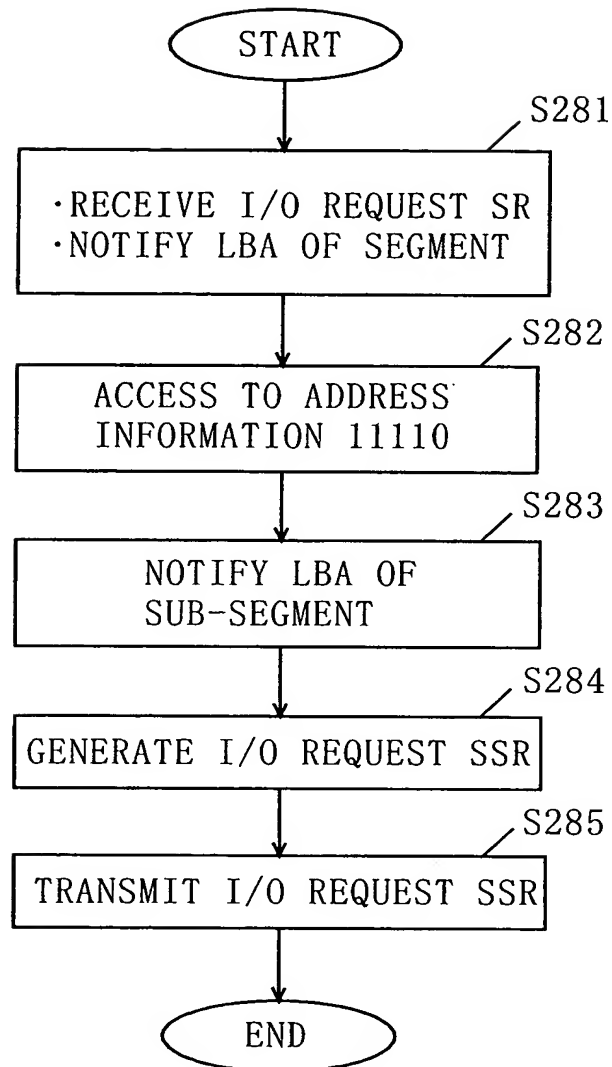


FIG. 65

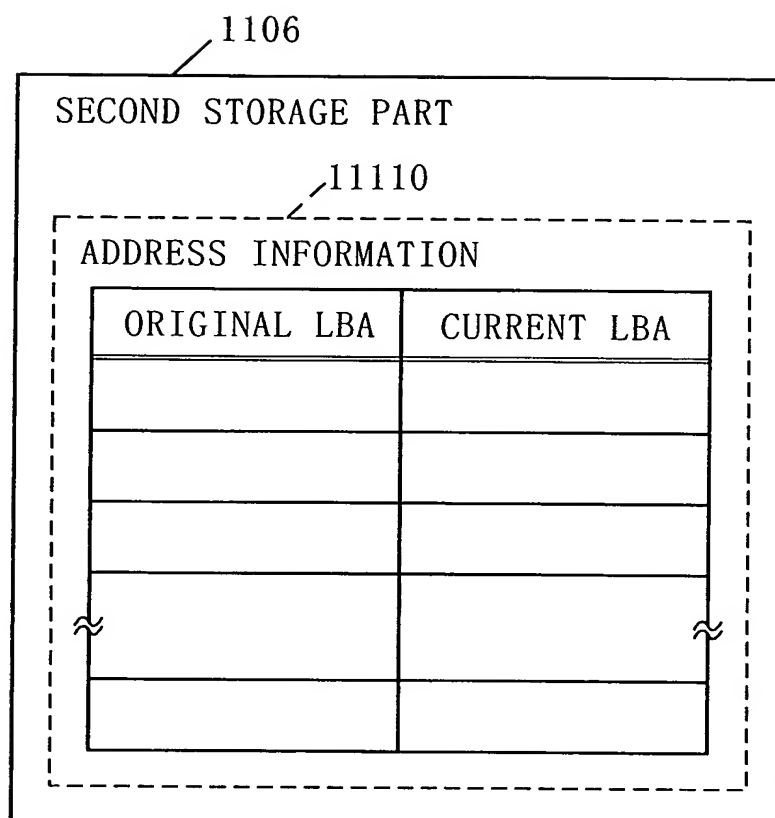


FIG. 66

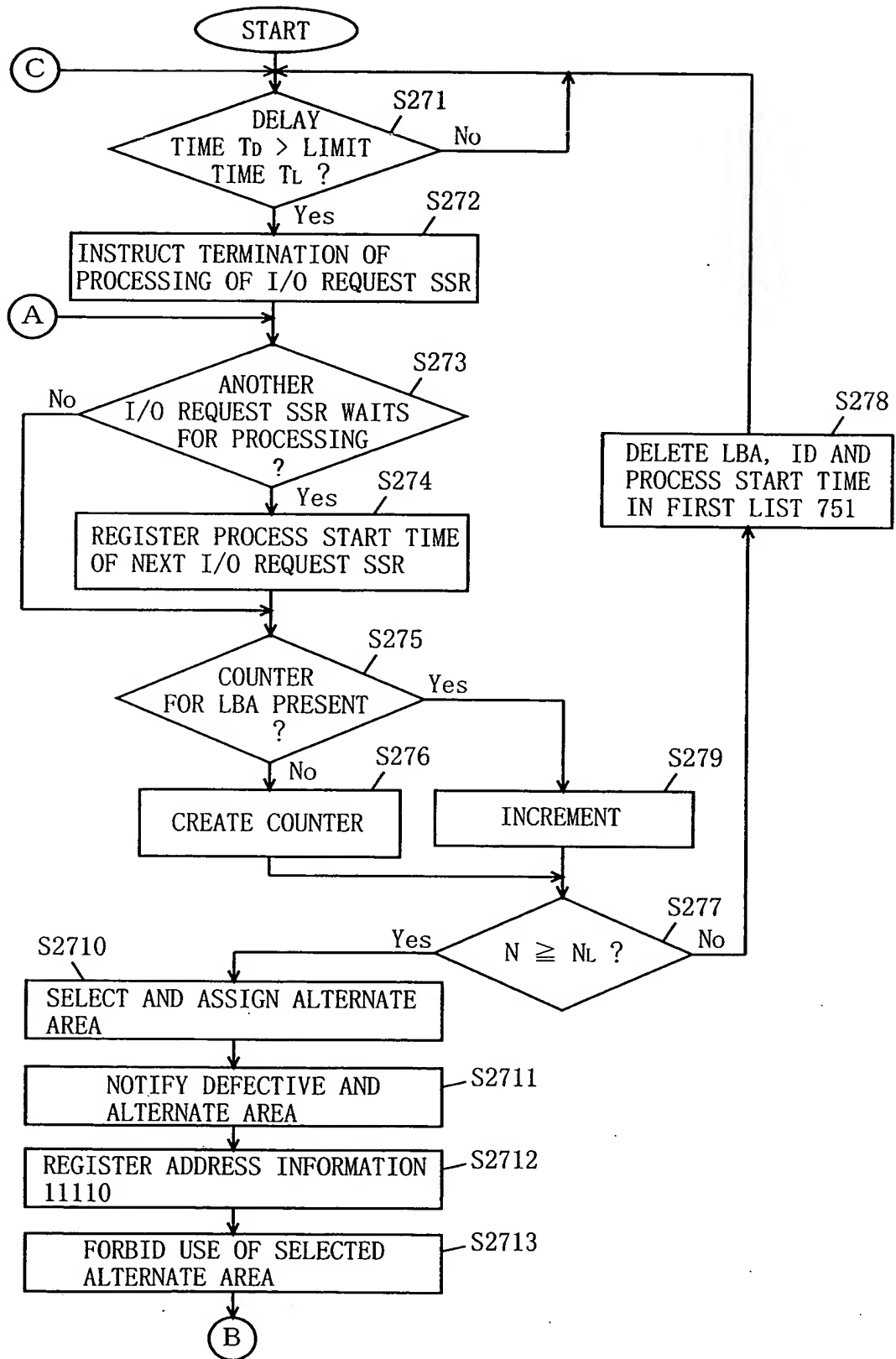




FIG. 67

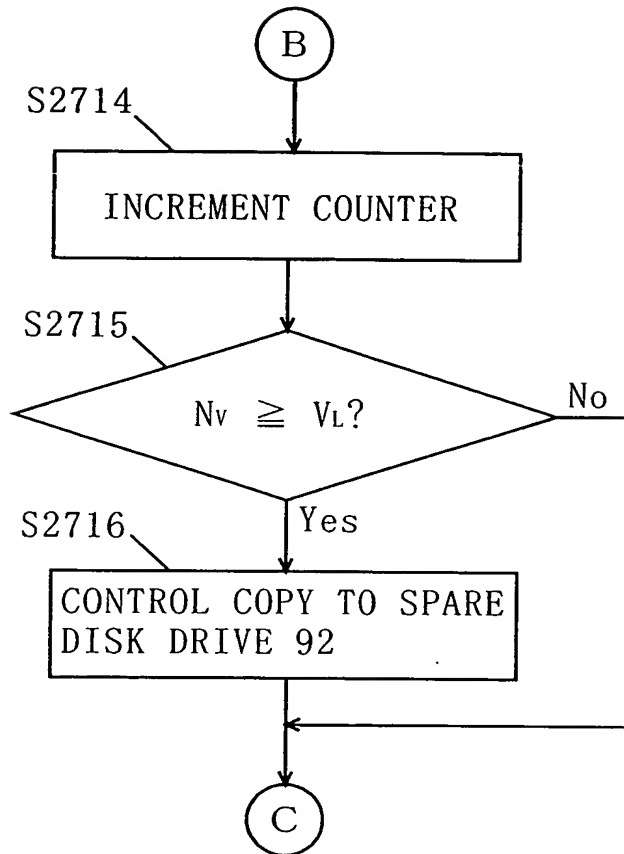


FIG. 68

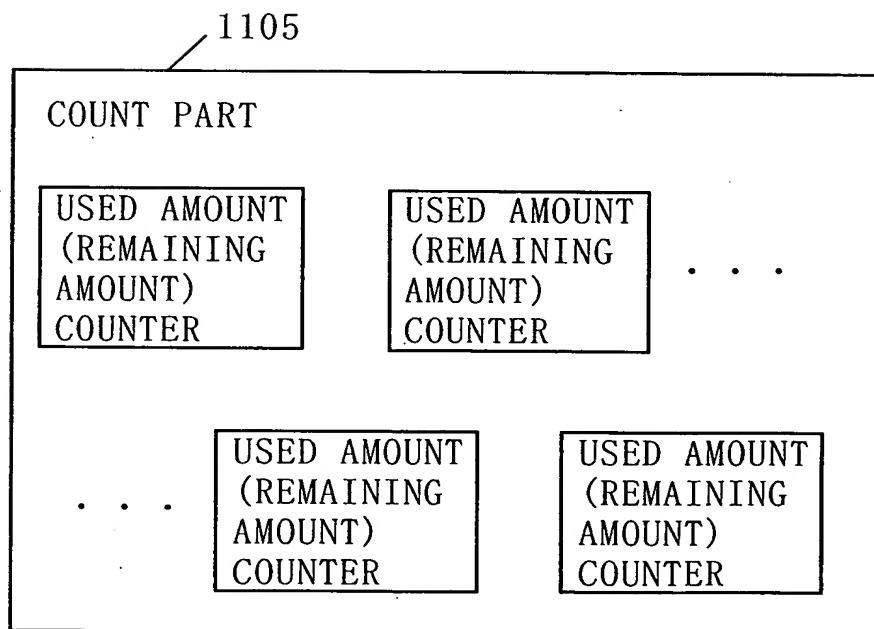


FIG. 69 PRIOR ART

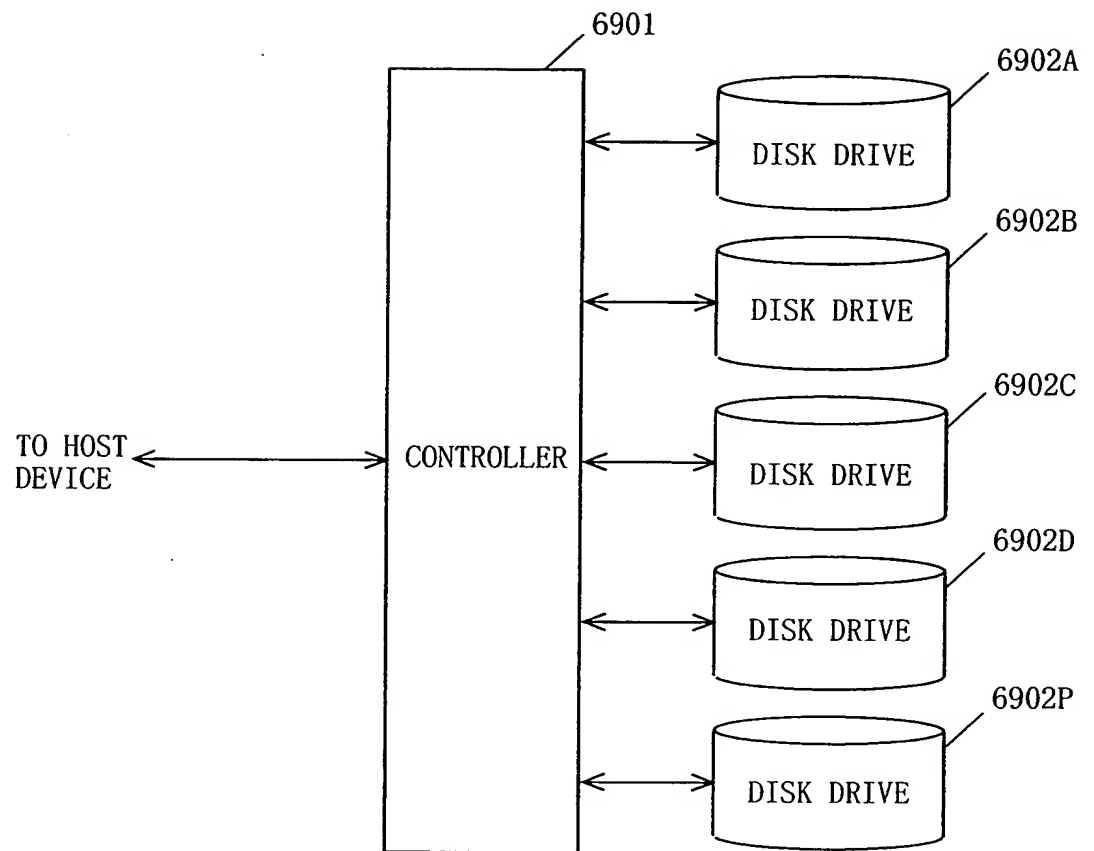


FIG. 70 a PRIOR ART

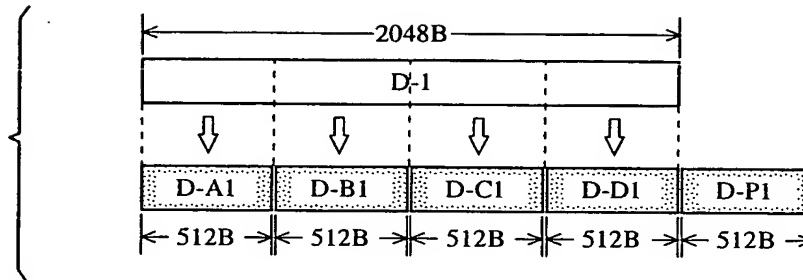


FIG. 70 b PRIOR ART

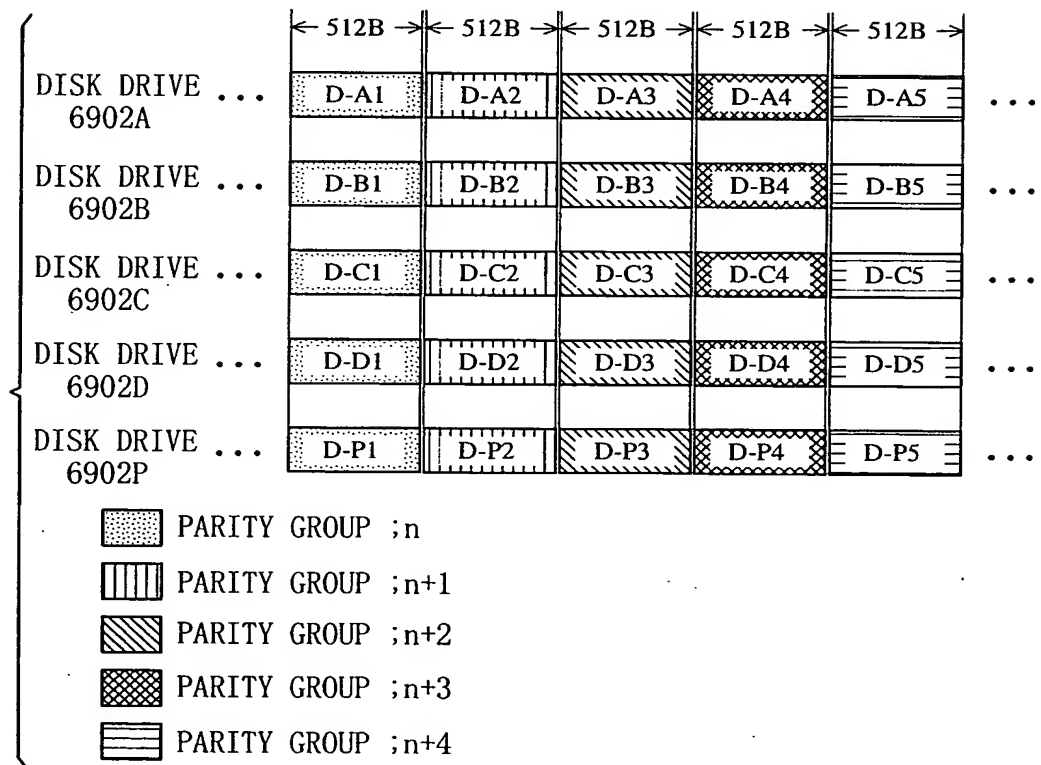


FIG. 71 a PRIOR ART

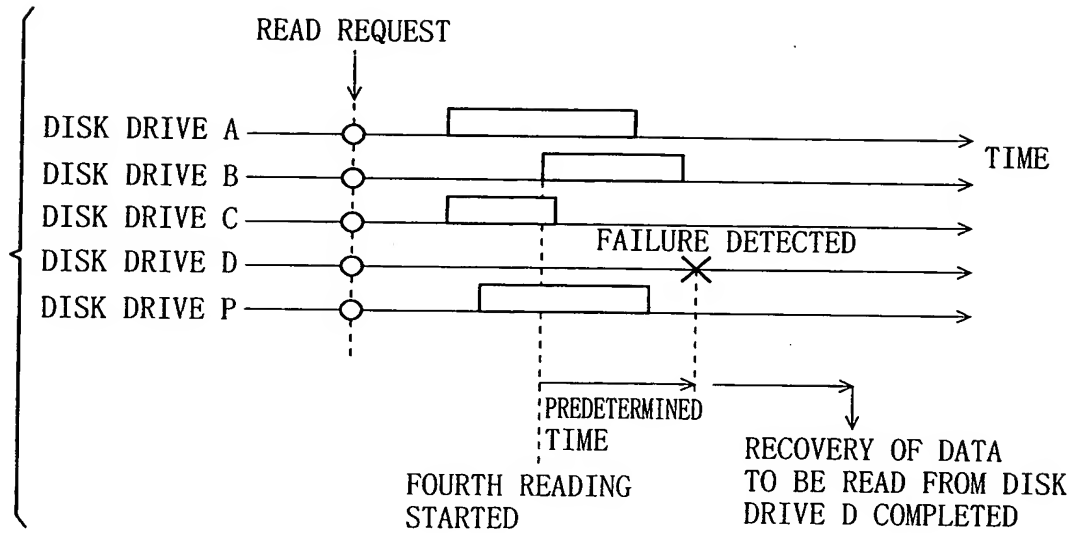


FIG. 71 b PRIOR ART

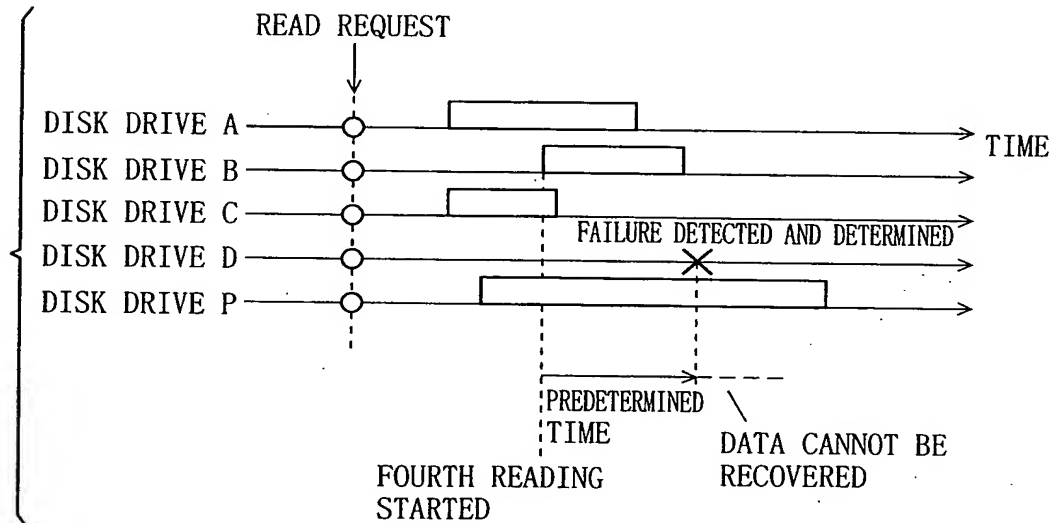


FIG. 72 a PRIOR ART

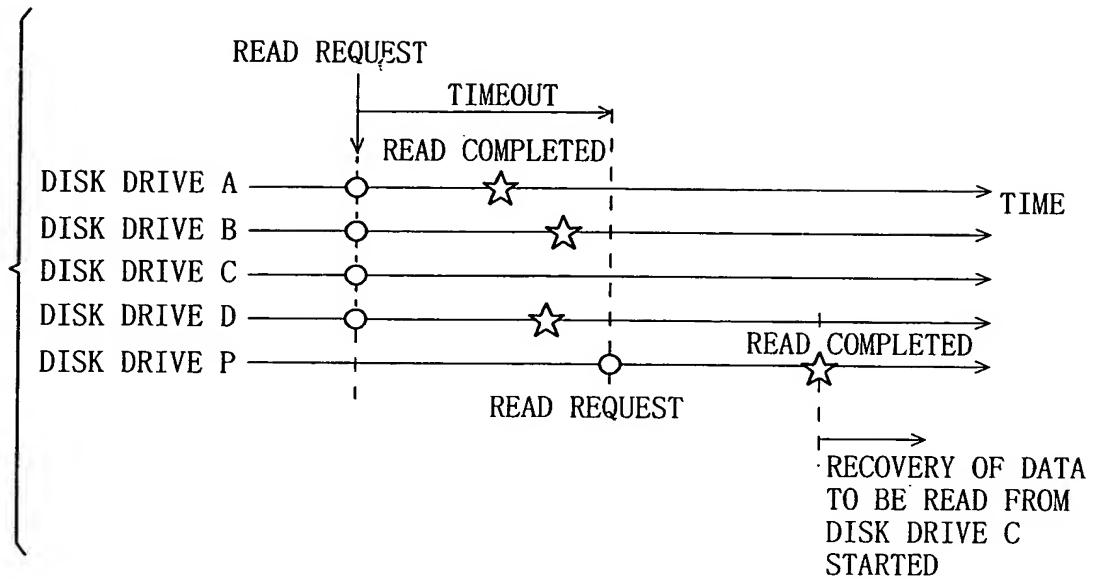


FIG. 72 b PRIOR ART

